CHILD SURVIVAL ACTIVITIES IN AZUAY AND MANABI PROVINCES/ECUADOR:

A REPLICATION AND EXPANSION OF A SUCCESSFUL COMMUNITY OUTREACH MODEL

MIDTERM EVALUATION

Submitted to:

CS VIII CHILD SURVIVAL GRANTS PROGRAM
FHA/PVC
AGENCY FOR INTERNATIONAL DEVELOPMENT

Submitted by:

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EXECUTIVE SUMMARY

The Midterm Evaluation of the project "Child Survival Activities in Azuay and Manabi Provinces/Ecuador: A Replication and Expansion of a Successful Community Outreach Model" took place in Ecuador from February 7 - 23, 1994. This project is an extension of a CS V project in the same provinces and is being implemented with funds from the USAID Child Survival Program (cycle VIII) and Project HOPE, in collaboration with the Ministry of Health (MSP) of Ecuador. The project began in October 1992 and will end in February 1995.

Members of the evaluation team included the Project Director, representatives of the project staff and MSP from both provinces, a representative from Project HOPE's USA headquarters and the external evaluator. Methods used to gather information included: visits to participating communities in Azuay and Manabi; interviews with counterparts, community health volunteers (CHVs), traditional birth attendants (TBAs) and mothers; review of the health information system; review of health education and promotional materials; comparison of data between the baseline and midterm surveys; and discussion with project staff.

This project faces enormous challenges in scope -- its target area includes 749 communities with a target population of 98,629 women and preschool aged children, many of whom live in difficult-to-reach communities. Another challenge is the number of interventions (immunization, nutrition, control of diarrhea1 diseases, vitamin A, maternal care, acute lower respiratory infections and vital statistics) which are to be implemented in the project's abbreviated time span of only 2.33 years. Thus, this Midterm Evaluation took place very shortly after the completion of the first year of project activities.

Yet, surprisingly, the accomplishments to date almost belie the nature and magnitude of the tremendous effort required to address the challenges mentioned above:

> a total of 185 CHVs and 188 TBAs have been trained and are actively involved in community-level health activities and refresher meetings with the MSP;
> the coverage rate for children completely immunized increased from 48.9 % to 72.9% ;
> the rate of exclusive breastfeeding in infants under six months of age increased from **20.6%** to 27.7%;
> the use of ORS or home-based fluid increased from 16.2% to 30.6%;
> and the coverage rate for women who received prenatal care increased from 67.7% to **80.7%;**

all in approximately 15 months of field-based activities.

While considerable gains were made in improving the knowledge, practices and coverage related to most interventions, difficulties are being encountered in the areas of acute lower respiratory infections and family planning. Overall, the project met and/or surpassed its objectives for the first year, with the exception of these latter two interventions. Underlying

these remarkable quantifiable achievements is the contribution made by the project's excellent relationships with the MSP, CHVs, TBAs, and other supportive collaborators. In fact, the MSP relationship, which had been a serious weakness at the midpoint of the CS V project, is now one of the project's great strengths. Similarly, the project staff itself is another great strength -- they have a keen sense of their capabilities and weaknesses, they know where they are, they know how far they've come and they know where they are headed.

There are two major conclusions:

1) The extended project team (including its implementing counterparts) has created a successful model for community mobilization and implementation of child survival interventions. The team has helped to dramatically increase the community's demand for child survival services and, in turn, has also empowered mothers, CHVs, TBAs and the MSP to respond positively; and

2) The project has reached a crossroads where it now has the opportunity to address the question of sustainability in selected locales. However, developing experimental models of sustainability would require an adjustment in other project activities.

The recommendations made for specific interventions are mostly minor and represent "fine tuning" of the implementation model. The major recommendation encourages the project staff, counterparts and donors to consider exploiting the favorable environment which now exists to develop expertise in sustainability.

Total costs of the Midterm Evaluation, including the survey and participation of Project HOPE's Assistant Director for MCH and the external evaluator, were approximately $14,955. While all members of the evaluation team contributed to this report, the external evaluator had the overall responsibility for coordination and writing.

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*Refers to the sections of the 1993 FHA/PVC CHILD SURVIVAL MID-TERM EVALUATION GUIDELINES which are covered in each chapter.

APPENDICES

ACRONYMS

ALRI	acute lower respiratory infection
APROFE	Ecuadoran Family Planning Agency
BCG	vaccine for tuberculosis
B	baseline survey
cantón	a political division equivalent to a county in the USA
CDD	control of diarrhea1 disease
charla	a short health talk
CHV	community health volunteer, trained by the MSP, Project HOPE and/c3r another NGO
CRS	Catholic Relief Services
c s	Child Survival
CSSP	Child Survival Support Program
DIP	Detailed Implementation Plan
DPT	vaccine for diphtheria, pertussis and tetanus
EPI	Expanded Programme on Immunization
FASBASE	Fortalecimiento y Ampliación de 10s Servicios Básicos de Salud en el Ecuador (Strengthening and Expanding Basic Health Services in Ecuador)
HIS	health information system
INEC	National Statistics Institute
IUD	intrauterine device
KAP	knowledge, attitude and practice

MSH	Management Sciences for Health
MSP	Ministerio de Salud Pública (Ministry of Public Health)
M	midterm survey
NGO	non-governmental organization
OPV	oral polio vaccine
ORS	oral rehydration salts
ORT	oral rehydration therapy
PACMI	Maternal-Infant Food Supplementation Program
PVO	private voluntary organization
SOLCA	Sociedad de Lucha Contra el Cancer (Society for the Fight Against Cancer)
TBA	traditional birth attendant
TOT	training of trainers
TT	tetanus toxoid vaccine
WFA	women of fertile age

I. BACKGROUND

This document presents the results of the Midterm Evaluation of: "Child Survival Activities in Azuay and Manabi Provinces/Ecuador: A Replication and Expansion of a Successful Community Outreach Model". This project is being implemented by Project HOPE, with funds from the USAID Child Survival VIII Program and Project HOPE, in collaboration with the Ministry of Public Health (MSP) of Ecuador.

The current project is an extension of Project HOPE's Child Survival V project which was implemented in the same two provinces (Azuay and Manabi) from January 1990 to October 1992. Although the former project lasted a full three years, the duration of the current CS VIII project will be only 2.33 years (i.e., 28 months) and the project will conclude at the end of February 1995. The main project office is located in Cuenca, the capital of Azuay, and another office is located in Portoviejo, the capital of Manabi. See the map in Appendix 1 for locations of these two provinces.

The CS VIII project area is a combination of parts of the CS V project plus expansion into additional *cantóns* (a political division equivalent to counties in the USA). In Azuay, the project is continuing its work in the cantons of Sigsig, Paute, Santa Isabel, Gualaceo and Girón and expanding into the cantons of Nabón and Oña. A total of 388 communities with 96,036 residents are in the project area.

Most of Azuay is located in the highlands of southern Ecuador. Although Cuenca, its capital, is the third largest city in Ecuador, it has only approximately 25% of the population of Quito, the national capital and second largest city. The participating families in Azuay are predominantly engaged in subsistence agriculture. High rates of male emigration (seasonal and permanent) to the coast in search of employment leaves women in charge of many households. The largest proportion of the population is mestizo and a smaller group is indigenous and generally bilingual. The illiteracy rate for women is 23 % .

In contrast to Azuay, Manabi is located along the coast and is the second largest province in Ecuador. Cantons which are continuing in the project are Bolivar, Junín, Montecristi and Pichincha and new cantons are Santa Ana and 24 de Mayo. A total of 361 communities with 129,063 are in the project area. Sources of income for participating families in Manabi include agriculture, fishing, factory work and employment as domestic labor. The population is predominantly mestizo and the illiteracy rate for women is 19 % .

MSP services in the rural areas of Azuay and Manabi are provided by the staff at the health center or sub-center level. The latter is typically staffed by a doctor undertaking her/his obligatory year of rural service and an auxiliary nurse who lives in the area. While health services are provided free, the major barrier to increased coverage in health services for the rural population is the geographical terrain. Many families participating in the project live several hours -- on foot -- from the nearest MSP health facility.

The current Project Director assumed his position in March 1991, three months before the Midterm Evaluation of the CS V project. The baseline for this CS VIII project was

completed in October-November 1992 and the Detailed Implementation Plan (DIP) was submitted in March-April 1993.

The goal of this project is to reduce the morbidity and mortality of children under two years of age and women of fertile age (WFA). Intervention areas include: immunization, control of diarrhea1 diseases, nutrition (including growth monitoring and breastfeeding), vitamin A, maternal care (including family planning), acute lower respiratory infections (ALRI) and improvements in the vital statistics system. The basic strategy is to support the MSP in its efforts to:

1. develop skills of its own staff in the major interventions of the project;
2. increase the demand for health services through education and mobilization activities;
3. support and develop the local community health workers (CHVs) and traditional birth attendants (TBAs); and
4. extend its health services into underserved areas.

II. METHODS

The midterm evaluation took place in the project provinces of Azuay and Manabi from February 7-23, 1994. Members of the evaluation teams for each province were:

Azuay:

Licda. Lucia Ortiz, Nurse Coordinator, Project HOPE-Azuay
Licda. Carmen Alvarado, Provincial Nurse Director, MSP-Azuay
Dr. Francisco Moreno, Country Director, Project HOPE-Ecuador
Ms. Iulianne Guy, Assistant Director, MCH, Project HOPE-USA
Dr. Mary Ruth Homer, external evaluator

Manabí:

Licda. Teresa Narváez, Nurse Coordinator, Project HOPE-Manabi
Dr. Guido Romero, Director of Development and Protection, MSP-Manabi
Dr. Fortunato Navia, Director of Community Health, MSP-Manabi
Dr. Francisco Moreno, Country Director, Project HOPE-Ecuador
Ms. Iulianne Guy, Assistant Director, MCH, Project HOPE-USA
Dr. Mary Ruth Homer, external evaluator

During the evaluation period in Ecuador, the team undertook a variety of activities in Quito, in the cities of Portoviejo and Cuenca and in the communities covered by the project. The schedule for this period, including the persons interviewed, is presented in Appendix 2.

Sources of information which the team used for this evaluation are:

1. Field visits - Four days of field visits were undertaken in Azuay and four in Manabi. For the most part, all members of each team visited the same activity. Time spent in the communities was devoted to observing the activities being undertaken by Project HOPE, the MSP, CHVs, TBAs, mothers and other community members. In addition, members of the evaluation team interviewed representatives of each of these groups. When possible, team members visited MSP health facilities, gardens, houses, schools, latrines and water sources. In Manabi, one field visit was made to a meeting of a community health bank, as this is Project HOPE's other program activity in Manabi which is being integrated more closely with CS VIII activities.

2. Interviews - Interviews took place with national, provincial, cantonal and local members of the MSP, CHVs, TBAs, mothers, fathers, school teachers, community leaders, collaborating nutrition students and NGOs, Project HOPE staff (of CS VIII and the community health banks project) and USAID Ecuador.

3. Baseline and Midterm Surveys - The baseline survey was undertaken in October/November 1992 and the midterm survey in December 1993 (Manabi) and January 1994 (Azuay). The questionnaires used in these surveys were based on that provided by the Child Survival Support Program (CSSP) of Johns Hopkins University. For the midterm survey, 239 mothers with children under two were interviewed in Azuay and 238 in Manabi. Results from the midterm survey were compared to those from the baseline and to the targets set in the DIP for Year 1.

4. Project Health Information System (HIS) - This system organizes and analyzes data from the monthly activity reports of the project's field staff and collaborating community health volunteers (CHVs), the trimesterly reports of traditional birth attendants (TBAs), the Baseline (B) and Midterm (MT) surveys and weight data on individual children in project communities. The HIS produces data for the quarterly reports of project activities, the Year 1 Annual Report, the Midterm Evaluation and other charts and reports.

5. Health education, training and promotional materials - During the field visits, the evaluation team observed the project team and CHVs using various health education materials, e.g., flipcharts, posters, puppets, games and slide shows. Others, such as radio spots, were reviewed in the office, In a similar fashion, the team became familiar with manuals used for training and the materials used in large group events for promotional purposes, such as banners and costumes. In Azuay, the team saw one video which provides an overall picture of the living conditions of the target population and two other as yet un-edited videos about training and specific project activities.

6. Discussions with members of Project HOPE - These took place with individuals or groups of two or three during the field visits. In addition, in each province, a meeting was held with all project staff and some collaborators in which each person present was asked to reflect on her/his personal experience with the project. In Manabi, a meeting was held to discuss methods for improving the integration of CS VIII and Community Health Banks activities.

7. 1993 Guidelines for Midterm Evaluations of FHA/PVC Child Survival Pro-a - Selected sections of these guidelines were divided among members of the evaluation team for emphasis in their interviews during field trips. Additional information was gathered by all members during the evaluation to answer other questions in the guide. The Table of Contents for this Midterm Evaluation for Ecuador does not follow the exact order as presented in the Guidelines. However, all parts of the Guidelines are covered and cross-references to each section in the Guidelines are noted in the Table of Contents.

All members of the evaluation team provided input into this document through their reports from interviewing others, through being interviewed themselves and by writing and/or reviewing specific sections. The external evaluator coordinated the production of this report.

III. DESIGN

A. CHOICE OF PROJECT INTERVENTIONS

The seven project interventions were chosen in collaboration with the MSP and the majority relate to the principal causes of morbidity and mortality in children under two years of age. Attention to maternal care is directed to reducing associated morbidity in women and to protecting both mother and child with tetanus toxoid. The intervention to improve the vital statistics system is an important corollary to assist in the design, monitoring and evaluation of the project's activities.

All seven project interventions, with the exception of acute lower respiratory infections, were part of the predecessor CS V project. Therefore, the project staff's and collaborating organizations' considerable experience in these interventions is being applied to the CS VIII project.

B. LOCATION AND SIZE OF TARGET POPULATION

An introductory description of the two project provinces, Azuay and Manabi, was given in the Background section. The overall target area is the same from the CS V project, with expansion into two new cantons in each province. The number of communities where the project is working and the numbers of persons in specific target groups for each province are shown below:

	Azuay	Manabí	Total
# communities	388	361	749
children under 2 yrs. old	5,770	7,755	13,525
pregnant women	3,139	4,219	7,358
mothers	17,461	23,466	40,927
women of fertile age	21,749	29,229	50,978

By all accounts, these numbers are very large for a typical Child Survival project which is three years in duration; and to increase the challenge, this particular CS VIII project is only 2.33 years long. After the DIP was prepared, a close review of census information and actual population dispersion for each province showed that the project's resources could not reach the anticipated target population (See the Annual Report for Year 1 for details). At that point, revisions were made in the actual area to be covered so that the original population numbers were maintained, but are covered in larger, less dispersed communities.

In order to address the large number of communities to be reached, the project developed three different models for implementation. Any given community can rotate through two or even three different models during the course of the project.

Plan A: Intensive Work

Communities in this model are visited once per month for one year. The project staff work closely with the CHVs and TBAs in order to develop their skills for managing interventions when they are on their own. Objectives in Plan A are to bring about positive changes in child care and maternal health practices, to increase coverage of health services offered by the project and to develop a strong relationship between the community and the CHVs and TBAs.

Plan B: Microconcentrations

Plan B offers a less frequent schedule of contact between the community and the project staff, MSP and other collaborators. The focus is on increasing coverage of health services, improving knowledge related to the project's interventions and to a lesser extent, on actually bringing about changes in practices. The MSP staff from the nearest health facility participate with the project staff in special one-day health fairs, called "microconcentrations". During these "micros", held once every two months, all residents from a specific health catchment area are invited to one community for a group of preventive and curative health activities. Not all activities are available each time, but most often they include: immunization for mothers and children, weighing of preschool age children, medical consultations for sick individuals of any age, prenatal consultations for pregnant women, food demonstrations, talks and sociodramas on particular health themes, films or slide shows on health topics, and information about family planning and gardening.

Plan C: Coverage

The objective of this plan is to increase coverage of key MSP services, i.e., immunizations, growth monitoring, supervision of TBAs and communication of important health messages. Communities in Plan C are visited once every three months, due to the logistical difficulty of reaching them or because they have been under Plan A and/or Plan B and are ready for less frequent contact.

Even though the implementation of Plans A, B and C are progressing fairly smoothly, it is apparent to both provincial teams that some communities just cannot be reached on a regular basis with even the minimum frequency of Plans B or C. Options for addressing this particular situation and others related to the large number of communities are discussed in Section XIV, Sustainability.

Iv. IMPLEMENTATION STRATEGY

The project has pursued a strategy focused on community-based preventive health education. Project activities are designed to increase the number of effective opportunities when members of the target population (particularly pregnant women and mothers of small children) can hear the educational messages and can be involved in actually putting these messages into practice.

The implementation strategy is two-pronged -- taking messages to the target population (at home, at school, in church, at "micros") and bringing the population to health providers (e.g., to the MSP health center for prenatal care and immunizations). Four key elements of this strategy relate to the involvement of the MSP, expanding the project team, promotion and addressing felt needs.

A. INVOLVEMENT OF THE MSP

Project HOPE staff interact with the MSP at two key, and equally important, levels -- provincial and cantonal. Discussions and decisions made at the provincial level establish the broad parameters for the collaborative activities which then take place in the field with the project and MSP staff working together. In Cuenca and Portoviejo, the provincial representatives of Project HOPE and the MSP determine how the two organizations will work together on any given activity and the resources which can be allocated to each.

Then, at the cantonal level, the Project HOPE nurse and local MSP staff set up their schedules for community-level visits and the activities involved in Plan B and Plan C interventions. One of the major underlying strategies of Project HOPE's intervention is to encourage and assist the MSP in mobilizing its rural doctors and auxiliary nurses to leave their health centers and visit communities. In some cases, making trips to isolated communities in a given catchment area requires the MSP and Project HOPE staff to pack for

a week-long trip. They travel by horseback or on donkeys and carry all of their equipment and supplies, such as vaccines, with them. In urban areas where the terrain is not the overriding factor, the strategy focuses more on planning and executing activities with the MSP, such as monthly training sessions. Project HOPE then gradually phases over the management of these activities to the MSP and then serves more of a support role.

B. EXPANSION OF THE PROJECT TEAM

One strength of the project is its ability to involve others besides the actual project staff in helping to promote the messages and activities.

The majority of communities where the project is working have at least one TBA and/or one or more CHVs who have been trained by the project. The houses of selected CHVs serve as distribution points for ORS packets. CHVs are elected by their communities and are approximately equally divided between women and men in number.

Once the CHVs and TBAs have been trained, they are expected to disseminate the project's key health messages within their communities during the intervals between visits of the project and MSP staff. School teachers, religious leaders and other community leaders are also invited to support the work of the local CHVs and TBAs by reinforcing the messages they promote and encouraging the community to participate in the project's activities.

Besides these community-based resources and the MSP, the project has developed links with other organizations who provide various types of personnel, equipment, communications and logistical support. Some examples, which are described in more detail in subsequent sections of this document, are the project's collaboration with Peace Corps Volunteers, nutrition and social work students at the University of Cuenca, the Military Hospital in Cuenca, friends and relatives of project staff, local NGOs (e.g., DONUM, Ayuda en Acción, SOLCA, SENDAS, Fundación Oswaldo Loor) and international PVOs (e.g., CARE, Catholic Relief Services, World Vision, PLAN International).

C. PROMOTION

In many Child Survival projects, one of the greatest challenges is determining the best ways to motivate the target population to participate in the preventive health activities offered and subsequent methods for sustaining their interest over a critical length of time. One very successful implementation strategy in this CS VIII project is to offer some activities which are more promotional than educational in nature. These activities provide opportunities to involve a broad cross section of the population and prevent the project from being perceived as merely for women and children.

One example of a very successful promotional activity is the "murga". A "murga" is a parade, usually held in the evening, which incorporates a blend of health education elements (e.g., banners with health messages, a skit, recognition of the winners of the local "healthy

baby" contest, playing a song with a health message) with typical parade elements (e.g., bicycles with balloons, groups of dancers, the local fire engine). Typically, the parade goes around the town square and the **final** event some two hours later is dancing at the termination point. There is something for everyone in the "murga" and the health education messages are interwoven in such a way as to be entertaining and not overbearing.

The "murga" provides one more opportunity to promote the collaboration between the MSP and Project HOPE. The evaluation team attended a "murga" held in the cantonal capital of 24 de Mayo. For this event, the nurses at the local MSP health center had made special jackets to complement their uniforms and marched as a group. They were obviously proud to be given such prominence in the parade and actively participated throughout the evening, even after a full day's work.

Another example of a promotional activity with an educational message was described in the Annual Report for Year 1. In order to make the point about the danger of using bottles to feed infants, one community had a parade. The banner which led the parade had a bottle on it with a red "X" across it. At the end of the parade, there was a **bonfire** where mothers brought their bottles and tossed them in.

D. ADDRESSING FELT NEEDS

Another successful operational strategy is to recognize and address the felt needs of key collaborating groups. The "microconcentrations'" do this by providing an opportunity for anyone to consult with a physician and, in some cases, for women to have a Pap smear taken (see Section V.B.5 - Care of Mothers - for more information about this component). These two activities are not specific project interventions, but are included in the "micro" activity to encourage as many people as possible to participate in the whole day. Typically, people have to walk up to three hours to reach the community where the "micro" is taking place. Therefore, a wide variety of activities -- both curative and preventive, promotional and educational -- are offered for adults as well as children.

Once people have arrived at the "micro", they are just as likely to participate in the preventive health education activities as the curative one which originally attracted them. In practice, the "micro" is implemented as a community health fair, with something for everyone. Children take part in special sessions where they learn about immunization, for example, and are given written materials appropriate for their educational level.

One especially noteworthy characteristic of the "micro" is the active participation of men, especially in Azuay. They are just as eager as the women and children to watch the sociodramas, receive a sample of food from the recipe demonstration, watch the slide show, consult with a physician, listen to health talks and participate in the question and answer sessions afterwards. Everyone who comes to a "micro" can **find** at least one activity, and usually several, in which she or he can participate actively.

Another strategy for addressing felt needs is to recognize the constraints posed by the low economic levels of the participating families who constitute the target population for preventive health activities. In Manabi, Project HOPE is also implementing a Community Health Banks Project which has the dual objective of improving the female-head-of-household's income and her health knowledge and practices. The Community Health Banks and their integration with the CS VIII project are described in more detail in Section XIV, Sustainability.

V. ACCOMPLISHMENTS

The CS VIII project which is the subject of this Midterm Evaluation is an extension of the CS V project which was implemented in the previous three years. In certain respects, the extension project is similar to the predecessor:

- it is governed by the overall guidelines of AID's Child Survival Program;
- it is being implemented in the same two provinces, i.e., Azuay and Manabi, with two additional cantons in each one;
- the major implementing counterpart is the MSP;
- the intervention areas are the same (immunizations, control of diarrhea1 diseases, nutrition, vitamin A, maternal care and vital statistics), with the addition of acute lower respiratory infections; and
- it is dedicated to community-based preventive health education.

In other respects, the CS VIII project is very different from its predecessor:

- the change in Project Director midway through the CS V project brought a significant positive change in the project staff's attitude toward and ability to work with the MSP and other counterparts;
- project staff are fully aware of the targets for all interventions and their progress towards meeting them; and
- project staff are conscious of sustainability issues, are working to address them and are capable of discussing them with counterparts.

The accomplishments described in the following sections are a result of the application of experience gained in the CS V project and the initiation of new strategies and activities in the CS VIII project.

A. TRAINING

Two aspects of the project's approach to training, for its own staff and for others, are particularly notable:

- Training is not a one-shot event -- in order for training to be effective, there must be opportunities for formal and informal refresher courses, on-site supervision and reinforcement and continual in-service activities to engage the participants in discussions about the application of their training; and

- New knowledge and skills can be learned faster and more effectively when a variety of credible persons serves to reinforce the training and accompanying health education messages.

1. For project staff

Training for new project staff was greatly facilitated by the fact that approximately 50% of the staff from the CS V project continued with CS VIII. The Project Director and two provincial coordinators took the main training roles. After an initial orientation, new field staff spent approximately two weeks working with an experienced Project HOPE nurse in one of the on-going project areas before being placed in a new canton.

On-going training is taken seriously by all project staff and is reflected in the numbers and types of courses in which they participate for their own professional development. When only one provincial team is represented in a major external training event, one or more representatives from that team share their new skills with the other team.

Within each provincial team, new skills and information are shared via in-service training activities. In Manabi, for instance, the staff meets monthly for administrative and continuing education purposes. Each month, a different team member makes a presentation on a health topic so that all the staff are kept up-to-date on a wide variety of relevant health issues. More details about the staff's own training opportunities are presented in Section VI, Human Resources.

2. For Community Health Volunteers (CHVs) and Traditional Birth Attendants (TBAs)

CHVs and TBAs are a fundamental component in the project's strategy, as they are a critical link between the community and the formal health system, which may be located miles away. The courses which Project HOPE and the MSP have designed and implemented for CHVs in both provinces since the beginning of the CS VIII project are:

- Initial training in the major interventions was accomplished through two courses of three days each, over a period of two months;

- In Azuay, subsequent training has included 61 CHVs in 12 courses and in Manabi, 33 CHVs in two courses; also in Azuay, there have been three courses on First Aid; and in Manabi, two family planning courses with APROFE; and

- There have been 35 follow-up training courses in Azuay and six in Manabi, from 6-8 hours each, for those who attended the initial courses;

- A seminar to evaluate the role of the CHVs, held in both provinces with 65 CHVs each; and

- Approximately once every two months, the CHVs meet with the project staff and cantonal MSP staff to discuss the work they've done, problems encountered, any new MSP guidelines, refresher training, announcements, and administrative activities.

The training provided to TBAs is described in Section B.5 below, in relation to the specific DIP objective about TBAs.

3. For MSP staff

The MSP's doctors and registered nurses in Azuay and Manabi were trained in various child survival interventions as part of a USAID-funded project being implemented by Management Sciences for Health in collaboration with the MSP. Therefore, Project HOPE complemented this effort by training the MSP's auxiliary nurses who work in the same health areas as the project. Specific training events have included:

- Orientation about the project and training in its interventions for MSP nurses and physicians who work in rural facilities;

- A course for auxiliary nurses and the Health Area Chiefs in training and supervision of CHVs and TBAs (held in Azuay, October 1993); and

- Refresher courses for auxiliary nurses in Manabi about the proper filling out of birth and death certificates (1993).

The next planned training event for MSP staff in Manabi will focus on communication strategies for basic health messages. In this course, MSP auxiliary nurses will learn the basic health messages, educational techniques for communicating these and how to make their own educational materials to support their health communications.

4. Other community members

In addition to the CHVs and TBAs, other community members have been selected for training in the child survival interventions. This strategy helps to multiply and reinforce the health education messages which are given to various groups and individuals who interact

with the project in different ways. Groups of mothers (formed into mothers' clubs) are given orientation to and practical lessons in the project's interventions through courses in their communities. These courses, called "seminar-workshops" are held for approximately 2.5 hours/day, over a three-week period, for a total of 30 hours. Trainers include the Project HOPE nurse and social worker and MSP representatives when available, e.g., a nursing student. During the first year of the project in Manabi, there have been 27 such workshops attended by 570 women.

Other courses are designed and implemented in each province to take advantage of interest expressed by special groups. In Manabi, the project team has implemented seven courses for school teachers, three for adolescent groups and one for secondary students. In Azuay , there have been two community educational workshops for teachers, students and parents.

B. SPECIFIC INTERVENTIONS

Information in this section is based primarily on field visits and the review of results from the Baseline Survey (B) and the Midterm Survey (MT). The samples for the Baseline and Midterm Surveys are from completely different communities, therefore results do not reflect the longitudinal progress of a given respondent, but rather the cross-sectional progress of the project as a whole. The sample for the MT survey consisted of a 30-cluster survey of mothers with children under two years of age who lived in participating communities. In Azuay, the sample was further refined by selecting mothers who, since the beginning of the project, had received at least five visits from project personnel for educational purposes. In Manabi, the sample included mothers who had received at least five visits from project personnel, for whatever reason.

The data selected for analysis and presentation in this Midterm Evaluation address the objectives in the DIP and several other related topics. These data were provided by the B and MT surveys and are presented in Table 1 in Appendix 3 for each province and for the project as a whole. For each indicator, the table includes the actual results from the B and MT surveys, as a percentage of the respondents for that particular question. The figures in the third column are the absolute differences in percentage points between the two surveys. The figures in the fourth column of each section represent the relative percentage change between the B and MT, using the figure from the B as the denominator.

In order to compare results of the MT to the DIP, the target figures for Year 1 are indicated below for each indicator. The end-of-project target figures which are found in the DIP are not included in the discussion below unless there is particular interest in doing so for a specific intervention.

The percentage figure which follows each heading below refers to the proportion of the CS VIII budget attributed to that particular intervention.

1. IMMUNIZATION (15%)

a. Comments on process, activities and field observations:

The MSP has been emphasizing immunizations very forcefully since 1986, but still there are areas where coverage is low. Major reasons for low coverage are the geographical inaccessibility of some communities (either year-round or just during the rainy season), low levels of mothers' knowledge of the importance of vaccination and distrust of the MSP. There are sporadic periods of vaccine shortage, but they do not constitute a major barrier towards increasing coverage rates.

In CS VIII, Project HOPE is assisting the MSP to increase its EPI coverage. For the most part, the collaborating MSP staff are directly responsible for giving the vaccinations, and project staff assist on an as-needed basis. The exception to this rule are those communities who are included in the Plan C schedule of visits. In these cases, the project staff are responsible for giving vaccinations. Major forms of support from the project to the MSP are teaching community members about the importance of vaccinations, mobilizing communities to bring their children for vaccination on the specified day, and providing transportation to the MSP to difficult-to-reach communities.

In the latter case in Azuay, for example, some of MSP's rural doctors and nurses ride donkeys for several days, accompanied by project staff, in order to reach distant communities in their service areas. This mobilization occurred only after Project HOPE secured the endorsement of the MSP's Area Health Director who then "encouraged" his rural staff to leave their facilities to visit communities. Having made this type of effort, some MSP staff now have a more positive attitude about the need for community outreach, the results which can be achieved and the satisfaction to be derived.

b. Comparison of results from the baseline survey (B) to those from the midterm survey (MT) and to the DIP objectives:

1. YR 1 DIP: 60% of children 12-23 months in Azuay and 58% in Manabi will be completely immunized by age one

Progress in vaccination coverage for key vaccines for children 12-23 months old in the two provinces are shown on the following page. More complete vaccination data are provided in Appendix 3.

	Baseline	vs	Midterm	
BCG:				
Azuay	**69.7**		**97.8**	
Manabi	73.7		**93.5**	
Total	71.5		**95.5**	
OPV3:				
Azuay	58.2		78.2	
Manabi	59.6		83.2	
Total	58.8		80.9	
DPT3 :				
Azuay	**59.0**		79.3	
Manabi	58.6		82.2	
Total	58.8		80.9	
Measles:				
Azuay	**54.9**		91.3	
Manabi	53.5		83.2	
Total	54.3		86.9	
COMPLETE				
				DIP objective
Azuay	50.0		77.2	60
Manabi	47.5		69.2	58
Total	48.9		72.9	

The results above reflect an **enormously successful** effort to increase immunization rates. The immunization coverage profile was similar in both provinces at the time of the B and the increments achieved are also similar. In just slightly more than one year of joint activities, Project HOPE and the MSP have surpassed their Year 1 immunization targets and are near (Manabí) and even beyond (Azuay) the final target of 75% complete coverage.

Project HOPE is careful and consistent to point out that these accomplishments are the result of the MSP's efforts, with support from Project HOPE. Initially, the MSP was concerned about distinguishing between Project HOPE's contribution to these results and their own. Now, the MSP is quite happy to report that the improvements are a product of joint collaboration, and has no interest in distinguishing between each institution's contributions.

2. **YR 1 DIP: 20% of women of fertile age in Azuay and 18% in Manabi will be protected with TT2**

As a first step for improving TT coverage, the project emphasized that women should have a maternal health card. The coverage for this card increased dramatically in both provinces

during the first year, and the project showed an overall increase from 18.8% (B) to 54.5% (MT).

Project HOPE and the MSP have made remarkable progress in increasing the coverage of women of fertile age with at least two doses of TT. Prior to October 1992, the MSP policy was only to vaccinate pregnant women with TT. Then, in October 1992, the MSP launched its first national campaign of TT for women of fertile age in all coastal provinces and selected high-risk cantons in the highlands. This change in policy, plus collaboration with Project HOPE and a donation of TT vaccine, has increased the coverage of TT2 for the combined project areas in Azuay and Manabi from 9.7% (B) to 40.0% (MT).

Currently, the MSP provides the vaccination cards and vaccines for this intervention, while Project HOPE supplies the syringes. Data collected by the MSP and HOPE show that, in the areas where they are working together, the coverage rates for TT2 are approximately four times greater than in other areas. During the field visits, staff reported that a year ago, mothers were reluctant to receive TT, Now, they willingly line up to receive their TT and bring their cards to have this recorded.

3. YR 1 DIP: 35% of mothers in Azuay and 60% in Manabi will receive education about the importance of immunization

In Azuay, a total of 7,339 women of fertile age received information about the importance of immunization due to the project's efforts since its beginning. This number represents 33.7% of this segment of the target population, and almost reaches the Year 1 objective established in the DIP. In Manabi, a total of 18,966 women of fertile age were reached similarly, representing 64.8 % of the target population. The Year 1 objective was exceeded for Manabi.

This objective is understood as an intermediate step which contributes to the mothers' practice of seeking vaccinations for her children and herself. In both provinces, the major increases in numbers of women who were informed about immunization probably made a major contribution to the positive results described above for vaccination coverage.

4. DIP: At the end of the project, mothers interviewed will demonstrate at least a 20% increase in their knowledge about immunization

The data from the survey used to evaluate this objective are from three separate questions:

1. At what age should a child be immunized against measles?

The percentage of mothers who knew the correct answer for this question increased from 19.9% (B) to 40.2 (MT) in Azuay and from 28.8% (B) to 32.4% (MT) in Manabi. The overall improvement was from 24.3 % (B) to 36.3 % (MT).

2. Who is protected by the tetanus immunization which is given to pregnant women?

The percentage of mothers who knew the correct answer for this question (i.e., both mother and child) increased from 5.5% (B) to 49.8% (MT) in Azuay and from 24.9% (B) to 29.8% (MT) in Manabi. The overall improvement was from 15.1% (B) to 39.8% (MT).

3. How many TT immunizations should a women receive in order to protect her newborn?

The percentage of mothers who knew the correct answer (two or more) for this question increased from 32.2% (B) to 76.6% (MT) in Azuay and from 71.6% (B) to 81.5% (MT) in Manabi. The overall improvement was from 5 1.6 % (B) to 79.0% (MT).

In both provinces, there have been improvements in the knowledge of women regarding measles and tetanus vaccinations. The increases were very dramatic in Azuay in the first year. The smaller increases in Manabi can be partially attributed to overall greater knowledge at the time of the Baseline and to the sample selected for the MT which was not as well defined as that for Azuay.

RECOMMENDATION

1. Decide how the indicator in section 4 above -- mother's increase in knowledge about immunization -- will be measured for the Final Evaluation (e.g., using some combination of the three questions which relate to it) and calculate results from the B and MT surveys to reflect progress achieved to date.

2. DIARRHEA (20%)

a. Comments on process, activities and field observations:

For the past several years, cholera has been a major health problem in Ecuador. The overall state of alarm has somewhat subsided due to the fact that cholera has been present for several years. Nevertheless, the MSP cannot let down its guard in its campaign to prevent and treat this disease. It is still extremely dangerous for children, especially those who are malnourished to any extent.

Diarrhea, from cholera and other pathogens, remains one of the top causes of morbidity and mortality for children under two years of age in the project areas. The project's interventions to prevent and treat it include: training of MSP staff, CHVs, TBAs and mothers; provision of ORS packets directly to mothers during community visits and to CHVs and TBAs; promotion of ORS and education about diarrhea during interaction with the community (during home visits, "micros", group sessions, etc.)

The MSP has been promoting ORS (packaged in Ecuador) extensively since about 1986. ORS is provided free and is fairly easily accessible in the project areas from the CHVs and MSP facilities. Yet many mothers still seek and are successful in obtaining antidiarrheal drugs -- whether free or not. This is particularly common when mothers visit private doctors and/or clinics. It is also still a problem with some MSP doctors and registered and auxiliary nurses, even though they were trained in MSP norms in Year 1 by the MSH-MSP project.

The health providers who prescribe and promote antidiarrheal drugs are not sufficiently trained, are not convinced about ORS, and/or feel they must yield to a mother's desire for "real medicine" to cure the diarrhea. The use of antidiarrheal drugs in the project areas decreased only slightly from the baseline to the MT in Azuay (from 33.7 % to 31.3 %) and more substantially in Manabi (from 65.5 % to 55.6 %).

RECOMMENDATION

1. Undertake some qualitative information gathering (e.g., through focus groups) from MSP and private health providers (separately) to understand the reasons for prescribing antidiarrheal drugs and resistance to promoting ORS.

2. Using the information gained in #l, engage in discussions with MSP counterparts and private health providers to develop strategies for trying to change the practices of those health providers who prescribe antidiarrheal drugs and do not promote ORS home-available fluids.

b. Comparison of results from the baseline survey (B) to those from the midterm survey (MT) and to the DIP objectives:

1. **DIP: At the end of the project, 55% of mothers in Azuay and 45% of mothers in Manabi will give their child home available fluids and/or ORS**

Questions on the CSSP survey are very repetitious in the diarrhea section and complicate the process of analysis and evaluation. For example, question #19 asks "What treatment did you give for diarrhea"? for which ORS, homemade ORS and other liquids are three separate possible answers. Then question #22 asks "What actions did you take during the diarrhea episode"? and in this case, some possible answers are "to start liquids", "give more liquids than normal" and give "ORS or home fluids". Other questions inquire separately about the quantities of liquids, breastfeeding and other foods given and the final question is about knowledge of what should be done for a child with diarrhea. Overall, the results showed a consistently greater frequency of correct responses for the MT than for the B in both provinces.

The DIP objective stated above has been divided into two parts for the purposes of monitoring changes during the project.

1A. YR 1 DIP: 45% of mothers in Azuay and 35% in Manabi will give liquids to their children under two years of age with diarrhea

The results below show the percentages of mothers in both provinces which give fluids to their children during bouts of diarrhea.

	Baseline	Midterm
Azuay	42.9%	59.4%
Manabi	25.2%	33.3%
Total	23.8%	46.8%

The data above show considerable improvement in mothers' practices about giving liquids. At the MT, the coverage rate for giving liquids in Azuay had increased to 59% (surpassing the objective) and to 33% in Manabi (just shy of meeting the objective). Overall, the use of liquids doubled, which is a major achievement for just 12 months of field implementation.

1B. YR 1 DIP: 21% of mothers in Azuay and 27% in Manabi will give ORS or home available solution

The B and MT surveys ask separately about the use of ORS and home available solution, and the disaggregated results are shown in Appendix 3. The results for both of these liquids are shown below:

	Baseline	Midterm
Azuay	12.2%	30.2%
Manabi	20.7%	31.1%
Total	16.2%	30.6%

Both provinces show considerable increases in the use of ORS or home available solution and each surpassed its respective objective for Year 1. Greater change in ORS use in Azuay can be partially attributed to the greater accessibility of ORS since the baseline. In Manabi, accessibility may not be as great a barrier to ORS use as is the attitude about and availability of antidiarrheal drugs, among other things.

RECOMMENDATION

3. HOPE Center should contact the CSSP to discuss the repetitious nature of the questions about diarrhea. The Final Evaluation questionnaire should have only one question (with two parts) which will be used to measure changes in use of ORS and home-available ORS.

4. Project HOPE-Ecuador should document carefully which parts of which questions in the CSSP questionnaire were used to evaluate each DIP objective for this Midterm Evaluation and how each indicator was calculated (e.g., as an average of two sections). This documentation will be useful for the analysis of data from the Final Evaluation survey.

2. **YR 1 DIP: At least 8% of mothers with children under two years of age with diarrhea will appropriately manage the nutritional needs of the child during and after a diarrheal disease episode.**

Since ORS and liquids are treated in the above DIP objective, the questions used to measure this objective relate to giving food during and after diarrhea. The first question was, "Is more food given during diarrhea? Results are:

	Baseline	Midterm
Azuay	0.0%	9.4%
Manabi	3.5%	10.7%
Total	1.6%	9.9%

The second question was, "Is more food given during recuperation?

	Baseline	Midterm
Azuay	1.0%	10.4%
Manabi	3.5%	1.8%
Total	2.2%	7.2%

In both provinces, great progress was achieved and the DIP objective was surpassed in teaching mothers to give additional food during diarrhea, given that this practice practically did not exist when the project began. Results related to giving more food during recuperation were equally as substantial in Azuay, but surprisingly went in the opposite direction in Manabi. This latter finding is probably the only result in the entire **MT** which was not in the same direction for both provinces, and can probably be explained by the very small percentages involved in Manabi. Nevertheless, the message about giving more food after a diarrhea episode appears to need more reinforcement in Manabi.

3. NUTRITION (15%)

a. Comments on process, activities and field observations:

The baseline survey showed that breastfeeding is almost universal, that 60-70% of the mothers began breastfeeding in the first eight hours after birth and that foods and other liquids are introduced often before the infant is four months of age. The family diet in both

Azuay and Manabi is based on tubers (plantains and cassava) and tends to be limited in diversity, particularly in fruits and vegetables.

A number of activities are implemented by project staff in order to improve the nutritional status of children under two in the target area. These activities include: short talks given by CHVs and project staff about a balanced diet; demonstrations on preparing nutritious recipes with locally available foods; short skits about nutrition topics during community visits; nutrition contests to create new recipes with vegetables from participants' gardens; growth monitoring of children under five; home visits to discuss the situation of malnourished children with their mothers; and large group events such as health parades in the cantonal capital cities.

The nutrition topics covered in the activities listed above include the advantages of breastfeeding, exclusive breastfeeding, proper weaning diets, the three food groups and how to diversify the diet, diets for pregnant and lactating women, causes of malnutrition and sources of vitamin A.

Nutrition messages are also woven into other project activities such as those described in the sections on diarrhea, vitamin A and maternal care.

b. Comparison of results from the baseline survey (B) to those from the midterm survey (MT) and to the DIP objectives:

1. YR 1 DIP: 65% of mothers in Azuay and 33% in Manabi will breastfeed their infants exclusively during the first four months

During the course of reviewing data for this Midterm Evaluation, it was determined that the method which had been used for calculating the "exclusive breastfeeding" indicator was incorrect. The revised indicator for exclusive breastfeeding is calculated indirectly by assuming that any infant who is not receiving any of the foods or liquids inquired about on the B and MT surveys is indeed being exclusively breastfed.

Therefore, this indicator was calculated again from the results from the B and MT surveys. In addition, since the DIP objectives above were based on the original calculations, they too needed to be revised to reflect the corrected levels of exclusive breastfeeding. In the process of revising the DIP objectives, the period for exclusive breastfeeding was increased from four to six months. The revised DIP objectives, by year and province, are shown below:

REVISED DIP OBJECTIVE: By the end of the project, 43% of mothers in Azuay and 21% in Manabi will breastfeed their infants exclusively during the first six months

By year, these objectives are shown below for Azuay (A) and Manabi (M):

	Year 1		Year 2		Year 3	
	A	M	A	M	A	M
% exclusive breastfeeding	36%	14%	39%	17%	43%	21%

Results from the B and MT surveys show that in both provinces, the Year 1 target levels of exclusive breastfeeding have been surpassed:

	Baseline	Midterm
Azuay	33.3%	38.8%
Manabi	9.6%	14.9%
Total	20.6%	27.7%

Although the YR 1 targets were not much greater than the baseline, this increase is still important, because it includes maintenance of the level which existed at the B plus an increment. In addition, in both provinces, results from the MT showed a consistent increase in knowledge about various practices important for successful breastfeeding. The overall rate of exclusive breastfeeding for the entire project at MT, 27.7%, is a very strong departure point for continued improvement in this area. Enough mothers, -- one in four -- in the target area are breastfeeding exclusively that this practice is not an isolated phenomenon any more in their communities. These women can be referred to, by name, as excellent local role models for their families, neighbors and other women in their communities.

The efforts to improve the breastfeeding profile are also aimed at decreasing the use of bottles, regardless of the age of the child. Although there is no DIR objective for this specific practice, data are available from the B and MT for monitoring any changes. The percentages of mothers who use bottles in feeding their children under two are:

	Baseline	Midterm
Azuay (O-3 mos.)	25.0	13.6
(4-6 mos.)	35.5	39.0
Manabi (O-3 mo.)	no data	45.0
(4-6 mo.)	no data	32.4

The results show a major decrease in bottle use in the youngest infants in Azuay in the project's first year. This decrease is of the same magnitude as the decrease in percentage of mothers who said that foods should be introduced before four months of age.

The only bottlefeeding data available for Manabi are from the MT. Not surprisingly, there is a higher prevalence of using bottles in Manabi than in the highlands of Azuay . In contrast to

Azuay, mothers in Manabi have easier access to bottles and are more exposed and vulnerable to commercial propaganda and bad advice from health providers and family members to use them. These overall results for breastfeeding and bottlefeeding are among the very few which reflect such a contrast between the cultures of the two provinces.

RECOMMENDATIONS

1. Given that breastfeeding is practically a universal phenomenon (i.e., all mothers do it, even though the length of time varies), the nutrition education should first acknowledge this as a positive factor. Secondly, the messages should focus less on the advantages of breastfeeding *per* se and more on the specific messages of breastfeeding immediately after birth, exclusively, without bottles and then on proper supplementation.

2. Given breastfeeding's role not only in nutrition *per* se, but in protecting against diarrhea, ALRIs and other infections and in family planning, this topic should continue to be given emphasis from whatever angle available, regardless of the specific health topic of the day.

3. Develop a question for the Final Evaluation questionnaire which measures exclusive breastfeeding more directly than the current indirect calculation. For example, the question might be, "Do you give your child anything else to eat or drink besides breastmilk?"

2. **YR 1 DIP: 20% of pregnant women in Azuay and 35% in Manabi will be more knowledgeable about nutritional needs during pregnancy and lactation**

The data from the B and MT surveys cannot address this question directly because respondents to questions #lO and 45 in the survey include all women who have a child under two years old. Nevertheless, since these women were pregnant within the two years prior to the survey, and many of them were still breastfeeding, the results are useful to monitor progress in this area.

For the question, "During your pregnancy, the amount of food which you consumed was more than, equal to, or less than usual"?, the results are similar in magnitude and direction in both provinces. In Azuay , the frequency of mothers who ate more food than usual increased from 14.8% (B) to 29.3% (MT), while the corresponding data from Manabi are 28.8% (B) and 40.3% (MT). Even though these results are very positive, there are still one in four women in Azuay as well as Manabi who stated at the MT that they ate less than usual during their last pregnancy. While improvement is definitely being made in this indicator, there is still an important segment of the population who needs to be encouraged to increase their food intake during pregnancy.

As far as improvements in knowledge about nutritional needs during lactation, three parts of

question #lO addressed this issue. Interviewees were asked, "What do you do in the first four months in order to breastfeed successfully"? and possible responses include "drink more liquids", "eat a varied diet" and "eat more". In both provinces, there were increases in each of these items, reflecting the women's improved understanding of their own needs during lactation.

RECOMMENDATION

4. For the Final Evaluation, decide how to measure the indicator -- increase in knowledge about nutritional needs during pregnancy and lactation -- using current or new questions in the CSSP survey and/or modify the DIP statement itself to better reflect the data which can be obtained to measure it.

3. YR 1 DIP: At least 5% of the mothers in Azuay and Manabi will have knowledge about the nutritional management of healthy, ill and recovering children under two years

Although this objective is very broad, the data used to measure it come from the question "What are important actions to take when your child has diarrhea?" Results used to evaluate this objective are the same as those used above in the section on Diarrhea about the appropriate management of the nutritional needs of the child during and after a diarrhea1 disease episode (objective 2). Overall, the positive results reflect considerable improvement in knowledge about proper diarrhea management and suggest that the project's messages are successfully overcoming almost universal beliefs to the contrary.

There is other information from the B and MT surveys which might be assumed useful for measuring DIP Objective #3 above, but which, upon closer scrutiny, is not very practical. In the nutrition section of the B and MT questionnaires, there is a list of ten groups of liquids and foods which mothers are asked if they give their youngest child. Except for the question about the use of bottles and a new one to be developed for exclusive breastfeeding, the other nine questions capture information which is not very useful for evaluation purposes. It cannot be summarized into one indicator to represent knowledge of or practice concerning the proper diet to give a child at various ages.

Furthermore, the project staff are already well familiar with the diets of young children in their target areas. Given that the majority of nutrition education sessions happen in groups, the project staff cannot really focus on specific age groups. However, when they do home visits, they can ask the mother right then about the child's diet and give very specific advice as feedback.

The objective for talking about the different food groups and the foods in each one is to encourage mothers to diversify the family's diet, and especially that of their preschool age children. For most of the participating families, this diversification can be achieved most easily by growing and consuming their own vegetables. Project staff should be careful not to

fall into the trap of overemphasizing which food goes into which food group and why, and expecting mothers to remember the details. Maybe mothers have another system for classifying foods which lends itself to the "diversification" message just as well. Mothers could be asked how they classify foods (e.g., those which grow underground; those which grow on trees) to determine how to reinforce the positive aspects of their system when discussing the need for a diversified diet. Maybe their system already has the elements of the three groups (foods for growth, energy and protection) even though the rationale for their categories is not necessarily a nutritional one.

RECOMMENDATIONS

5. Determine how mothers classify foods and then modify the discussion and educational techniques about diversification to include the rationale for and names of the categories they use.

6. With the CSSP, discuss the issue of the food intake section of the questionnaire and the fact that the data obtained cannot be used effectively for planning and evaluation purposes. Take out the long list of foods currently in the MT questionnaire. If necessary, develop new questions which can be easily applied and analyzed in order to measure understanding of the FACTS FOR LIFE messages and the indicators in the DIP.

GROWTH MONITORING

a. Comments on process, activities and field observations:

During visits to the community for health education sessions and the "micro-concentration" days, project staff and volunteers weigh children under five years old. They have emphasized the need for the mother to have a growth chart and to bring it for the weighing sessions. Immunization data are registered on the same chart.

In the "microconcentration" activities of Plan B and C, children are weighed and their weight is plotted immediately and analyzed. Mothers are given advice accordingly, but the time and circumstances are not conducive to dialogues with individual mothers. Project staff note those children who are malnourished and who should be followed-up by home visits from the CHV and/or referred to the closest MSP health facility. In practice, however, little follow-up occurs.

Communities involved in Plan A represent a different opportunity for growth monitoring. There are fewer children present and project staff visit on a monthly basis. In these cases, there is greater potential for more one-on-one dialogue with mothers who have malnourished children. During the evaluation team's visit to El Tablón, Azuay, the project team used an innovative technique for the growth monitoring session:

First, all preschool children were weighed, and their weights were recorded in the project's notebook. Then, the team and the CHVs transferred the weights to the growth charts while the group was engaged in watching a sociodrama. Next, the project nutritionist gave a short talk on the meaning of weighing and used a large version of the growth chart as a visual aid. The following step was to return the charts to the mothers so they could see the progress of their own children. Since many mothers in this group were non-literate, the CHVs and staff present mixed in with the mothers to help them interpret the graphs. At a later point, all mothers with malnourished children received individual consultations, a bottle of vitamins and encouragement to return the next month to have their children weighed again.

Neither of these two methods -- that used during the "micro" and that described for El Tabldn - is necessarily ideal. Nevertheless, they do help to point out the difference in time which must be invested in order to increase the chances that the growth monitoring session is useful to individual mothers. In the case of the "micro", project staff are not able to provide adequate counselling when it is necessary, very often resulting in rapid, one-way communication with mothers of malnourished children which may leave the mothers feeling criticized for bringing their children to be weighed. These children cannot be followed-up by the staff nor the MSP, and the data collected serve surveillance purposes only which chart the nutritional status of a sample of children in the community every three months.

In El Tablón, more of the necessary ingredients for a productive growth monitoring activity are present. However, if this is not an activity which CHVs are going to be able to take over, and implement correctly, it should be reconsidered. Most likely, the mothers of malnourished children need to hear and act on the messages about breastfeeding, feeding during illness, treatment of diarrhea, and dietary diversity. Since project staff already know that these messages are the important nutritional ones for their population, they do not necessarily have to go through the growth monitoring process to identify at-risk children. Other methods are quicker -- e.g., finding mothers who use bottles, who are not breastfeeding exclusively and who do not know when and how to give ORS.

Growth monitoring is a time-consuming and complex process. If it cannot be done effectively to reverse the course of malnourished children, then it is probably not a good use of the staff's time. If growth monitoring is the only "carrot" which attracts mothers to the health education session, then the project staff, MSP and CHVs should consider alternative ways of reinforcing the mothers for attending, without growth monitoring.

b. Comparison of results from the baseline survey (B) to those from the midterm survey (MT) and to the DIP objectives:

1. **DIP: 31% of children under three years in Azuay and 38% in Manabi will be participating in growth monitoring sessions quarterly, representing 45% of children in Azuay and 40% in Manabi (covered by the project)**

All of the field personnel in the project -- the MSP, CHVs, TBAs and Project HOPE staff --

have strongly emphasized with mothers the importance of having a growth chart and having their young children weighed regularly. The frequency of mothers who have a growth chart for their children under two increased in both provinces during the first year of the project, and overall, from 74.8% (B) to 86.8%.

During the B and MT surveys, the mothers who had growth charts were then asked to show the card to see if the child had been weighed in the previous three months. The increase in this indicator during the first year of the project is quite substantial: from 24.6% (B) to 58.2% (MT) in Azuay, from 46.3% (B) to 72.7% (MT), and from 35.6% to 65.9% overall. These large increments reflect the increased availability of this service brought to the communities together with the mothers' interest in having their children weighed. Although the DIP objective implies that a certain percentage of children will participate in growth monitoring quarterly, meaning sequentially, the surveys only measure this indicator cross-sectionally by looking at the timing of the last weight plotted on the growth chart. That is, the long-term participation of individual children is not evaluated by the surveys, just the overall percentage which happened to participate in the last session.

The increase in numbers of children with growth charts is important as these charts are also used to record immunization data. Although growth monitoring appears to be a popular activity among the participating mothers, the mere fact that a child was weighed does not necessarily guarantee that the mother has improved her knowledge and practices about the proper care of the child. No matter how many people get involved in the actual process of growth monitoring on a given day in a given community, it is a "dead end" unless the mothers who need help with child care are somehow given it in a supportive context. A more comprehensive DIP Objective related to growth monitoring might take the form of "xx% of children will participate in growth monitoring sessions quarterly, and of those classified as losing weight or malnourished, yy% will receive individual counselling and follow-up within the next three days".

RECOMMENDATIONS

1. Reconsider the growth monitoring activity as only desirable when it can be done correctly and with the proper frequency and follow-up.

4. VITAMIN A (10%)

a. Comments on process, activities and field observations:

The activities devoted to improving the vitamin A intake of the target population consist of promoting home gardens and providing nutrition education about vitamin A. Each provincial project team has an agronomist and nutritionist who work together in this respect. The agronomists work with community leaders, parents and school children to develop various types of gardens. The seeds used are a combination of imported hybrids donated by Project HOPE and seeds purchased locally. Seeds are used in demonstration plots and are

also sold to participating families for a nominal cost.

In Chunazana, Azuay, for example, the agronomist first worked with the mothers' club to create a group garden for growing seedlings. Once the seedlings are large enough to transplant, each of the mothers takes some home for her own garden. Mothers can also buy seeds from the project for a nominal cost. Gardens developed by these mothers' clubs in Azuay provide seedlings for approximately 15-25 mothers.

A school garden was also planted and growing well in Chunazana, but then all crops died except the radishes when the school teacher was absent for two months. In a subsequent activity, the agronomist encouraged community members to prepare an additional plot near the school. During one of the "microconcentration" days, approximately 100 people of all ages gathered to plant this plot. The responsibility for watering this plot will be organized by the community leader. Seedlings from this demonstration plot will be donated to interested families.

Animal fertilizer is used on demonstration plots and promoted for use in home gardens as well. In addition, biological means of pest control are taught by the agronomists. While insects and others pests do not seem to be major impediments to raising gardens, animals are. The agronomists have successfully dealt with this problem by encouraging participants to keep the animals away from the garden (i.e., tying them up or building a secure fence) or by keeping the garden away from the animals (i.e., by raising it out of reach).

This latter example is promoted in Manabi, where some gardens are built on bamboo platforms and others, much smaller, are planted in small containers and kept on porches. Starting out with containers on a small scale is one of the project's effective gardening strategies as it allows mothers to develop a new skill and interest without investing a lot of time and energy. When these mothers are successful with their first plants, usually radishes, then they are encouraged to try others.

As there is no government counterpart for the gardening activity, the agronomists have to train all other project staff and the CHVs to be able to provide support and technical assistance for this component. Once trained, these other collaborators can be extremely helpful when the agronomist is not present. This multiplier effect of the agronomists' expertise is especially important in Manabi, where a greater percentage of the participating families do not have as much agricultural experience as those in Azuay .

Nutrition education about vitamin A is often incorporated into the project's activities through food demonstrations using produce from the new gardens. Project staff, together with volunteers, show how to prepare the dish, and prepare it in enough quantity so that everyone present is able to taste it. The recipes emphasize the use of local ingredients which are available and affordable to the community. This is a very popular activity which deserves more careful follow-up in home visits to determine if mothers are incorporating the new recipes into their menus. If they are not, then the staff need to identify the barriers and, with

the mothers, determine how to overcome them.

Until recently, information about the prevalence of vitamin A deficiency in Ecuador came from surveys implemented in 1959 and 1986. Results from these surveys did not indicate a vitamin A deficiency problem of public health proportions and therefore, the MSP does not have a policy for the delivery of vitamin A capsules. However, just last year, a new national survey of 1,800 persons was implemented in five regions to assess the prevalence and severity of vitamin A and iron deficiencies, measuring serum retinol, hemoglobin, ferritin and dietary consumption. On February 25, 1994, the results from this survey will be presented to health officials. Representatives from Project HOPE and the MSP will attend. Based on the results, the project activities in vitamin A may need to be modified to respond to increased needs in this area.

b. Comparison of results from the baseline survey (B) to those from the midterm survey (MT) and to the DIP objectives:

1. **YR 1 DIP: 130 families in Azuay and 260 in Manabi will have home gardens and demonstration gardens in the priority high-risk areas (14 communities in Azuay and 18 in Manabí)**

Results from the HIS at the time of the MT showed that 234 family gardens have been started in Azuay and 200 in Manabi. While this latter number for Manabi is below the provincial target, the total number of gardens for the two provinces, 434 greatly exceeds the combined target of 390.

Gardening is obviously a popular project activity, particularly in Azuay, where participating communities are predominantly agricultural. For example, in Ghunazana, Azuay, 25 mothers have planted a demonstration garden and their own home gardens as a result of only six visits from the agronomist over a six-month period. Some of the gardens visited by the team were created with obviously great investments of work, as the terrain in some participating communities is quite steep and natural fertilizer from animals needs to be collected to enrich the soil.

Although the agronomists have explained that many of the seeds are hybrid, some of the families still let some of the plants go to seed in hopes of obtaining a supply for next year. In addition, even though most seeds are sold to participants at nominal cost, the amount of money recovered would not be enough to buy the equivalent supply at market price if necessary. Provision of donated and subsidized seeds at the early stages of the project is a viable strategy for developing interest and promoting success with low risk. However, there is a need to develop more long-term strategies for maintaining a seed supply at affordable cost to participants.

RECOMMENDATIONS

1. Develop and test locally feasible strategies for maintaining the seed supply when Project HOPE is no longer able to provide free and/or subsidized seeds. Consider one or more of Project HOPE's Cornmunity Health Banks as an intermediary for purchasing seeds in bulk and then selling in smaller quantities to families in the project area. Consult with other gardening projects in Ecuador; ask Dr. David Nelson to provide VITAL report on home gardens; consult with Project HOPE staff in Guatemala.

2. **YR 1 DIP: 186 mothers in Azuay and 306 in Manabi will participate in education events in the priority areas**

Results from the HIS at the time of the MT showed that 419 mothers in Azuay and 407 in Manabi have participated in educational events about gardening and vitamin A, surpassing the targets in both provinces. However, although many women are participating in educational events and many have started their own vegetable gardens, there is a need to pursue this topic further and evaluate to what extent mothers are applying the information made available from these sessions.

RECOMMENDATIONS

2. Create another objective for the vitamin **A** intervention which addresses changes in practice related to the consumption of vitamin A-rich foods. E.g., xx% of mothers with new home gardens have prepared and served a vitamin A-rich dish for her preschool age children in the last week. Monitor this objective at various intervals before the Final Evaluation.

3. Develop and include in the Final Evaluation survey one question on the role of vitamin A in the prevention of disease and another on sources of vitamin A in the food supply.

5. CARE OF MOTHERS (20%)

a. Comments on process, activities and field observations:

The maternal health component includes education about the importance of prenatal and postnatal care, family planning, diets for pregnant and lactating women, and immunization with tetanus toxoid. As described earlier in the immunization section, Project HOPE has given a huge boost to the TT program through its large donation of tetanus vaccine early in the project which helped the MSP in its efforts to expand TT coverage from only pregnant women to all women of fertile age.

Activities for implementing the maternal health intervention include: distribution of maternal

health cards, immunization of women of fertile age with tetanus toxoid, training TBAs about identifying and referring high-risk pregnancies and in techniques for safe deliveries, and educational sessions with mothers in their communities.

Promotion of family planning is carried out in collaboration with APROFE, the Ecuadoran Family Planning Agency. APROFE staff have trained project staff about the different kinds of family planning methods available and how to refer clients. APROFE staff often accompany project staff during community visits. When they cannot, project staff provide the information. In addition, 30 CHVs serve as community-based distributors of contraceptives and receive a slight compensation through this activity.

In addition to APROFE, the project is collaborating with SOLCA (Sociedad de Lucha Contra el Cancer -- Society of the Fight Against Cancer) in Manabi. In this province, SOLCA operates a mobile van which visits communities in order to take PAP smears. When possible, the project coordinates with SOLCA to have its van come to the "micro" days. The collaboration with SOLCA is mutually beneficial as the "micro" activity helps draw women for the PAP smears and vice versa.

Of special note is the work with TBAs. The project staff has acted as a catalyst in developing a viable, professional and productive relationship between TBAs and the MSP. Before Project HOPE's intervention, this relationship was best characterized as one of mutual distrust and hostility. Project staff have focused on improving the TBAs' skills and developing channels of communication between them and the MSP so that both groups appreciate their special contributions to protecting the health of their female patients.

b. Comparison of results from the baseline survey (B) to those from the midterm survey (MT) and to the DIP objectives:

1. **YR 1 DIP: In Azuay 7% and in Manabi 20% of pregnant women will give birth protected by TT2**

This objective can only be measured by referring to MSP records. Data obtained from the MSP for the MT Evaluation show that 17.7% of women in Azuay and 40.0% in Manabi gave birth protected by TT2. These rates are extremely encouraging and suggest that the MSP and project staff will certainly exceed its overall goals for this objective by the end of the project.

2. **YR 1 DIP: 48% and 75% of pregnant women will receive some prenatal care in Azuay and Manabi, respectively**

The question from the survey for this indicator reads "during your last pregnancy, did you have any prenatal visits?". Built into this question is the implication that the visit was to a trained person in the community, at an MSP facility or at a private clinic. Results showed that in Azuay, this indicator increased from 64% (B) to 74.5% (MT); in Manabi, the increase

was from 71.6% (B) to 87.0% (MT); and overall, from 67.7% (B) to 80.7% (MT). The provincial coverage levels are well over the projected targets for this period and actually surpass the targets for the entire project period.

3. YR 1 DIP: 35% and 48% of mothers will receive some post-natal care from health facility staff in Azuay and Manabi, respectively

Results showed a very slight increase in this indicator in Azuay to reach a coverage of 23.8 % at MT. In Manabi, the increase was greater, and the coverage reached at MT was 44.1%. Overall, coverage increased from 24.1% (B) to 34.0% (MT). Since the provincial targets were not reached for this period, there is still need in both provinces to identify and address the barriers which keep mothers from seeking post-natal care from a health facility. This challenge is obviously greater than that discussed above about encouraging women to seek prenatal care.

4. YR 1 DIP: At least 5% of pregnant women in Azuay and Manabi will recognize danger signs during pregnancy

This indicator is calculated by averaging the frequencies for all correct responses for any given danger sign. Using this calculation, the knowledge of danger signs during pregnancy was very limited at the time of the baseline: only 4.0% in Azuay and 7.8% in Manabi. By the time of the MT, this indicator had increased to 10.2% in Azuay and 13.9% in Manabi, well surpassing the target for this period.

5. YR 1 DIP: In Azuay, 35 new and 72 previously trained traditional birth attendants will be trained and receive follow-up supervision by project and MOH staff and in Manabi, the corresponding figures are 35 new and 96 previously trained TBAs

Training for TBAS and CHVs is implemented on a canton-by-cant6n basis in both provinces according to the plan presented in Appendix F of the DIP. The MSP has developed a policy of not training new TBAs, as they wish to encourage women to seek prenatal care at the MSP health facility and to give birth there. Therefore, in Azuay , only 10 TBAs were trained for the first time by the project, with MSP approval, in the expansion cantons of Nabón and Oña. Similarly, in Manabi, 22 TBAs were trained for the first time in the expansion cantons. A total of 59 refresher courses were conducted for TBAS, of which 41 were in Azuay and 18 in Manabi.

This aspect of the project is functioning quite smoothly. In fact, in some cantóns of Manabi, the MSP has taken over the implementation of the regular refresher meetings for the TBAs. More details about this activity are presented in Section XIV, Sustainability.

6. YR 1 DIP: At least 9% of mothers with children under two years in Azuay and 35% in Manabi will use modern family planning methods

Results for Azuay show an increase in the use of modem family planning methods from 5.4% (B) to 7.5% (MT). In Manabi, the increase was from 30.8% (B) to 36.2% (MT) and overall, from 17.1% (B) to 20.9% (MT). This is one of the few areas in which the project has not met its targets for Year 1, even though there has been some progress in both provinces. Not surprisingly, project and MSP staff report that this is one of the most **diffkult** areas to address, due to *machismo* on the part of men, shyness and fear on the part of women, and the overriding influence of the Catholic Church. Project staff have found that they can offer family planning information through group meetings and audio-visuals, but effective communication with couples is best achieved through home visits.

6. ACUTE LOWER RESPIRATORY INFECTIONS (15%)

a. Comments on process, activities and field observations:

There were no interventions for ALRI in the CS V project, therefore project staff had to develop new activities in this areas for CS VIII. In January-February 1993, project staff developed a manual using the current case management guidelines of the MSP. In March 1993, the MSP adopted the new Acute Respiratory Infection classification of WHO which changed the way that ALRIs were identified and triaged for further treatment. As a result, the curriculum, manuals and materials had to be revised and, in May, the training of mothers continued using the new ARI norms. Not surprisingly, the change in MSP norms and the project's adoption of the new norms created delays in implementation which are then reflected in lower levels of achievement for the period than projected.

Project staff and the MSP agree that it is difficult to teach mothers how to effectively identify the danger signs and treat ALRI. For the MSP itself, ALRI has only recently become a higher priority, even though they admit that ALRIs have long been a major cause of mortality and morbidity in preschool children. There are no "handouts" for ALRI, as there is ORS for diarrhea and seeds for gardens. Nevertheless, the staff have developed practical ways to communicate to mothers the dangers of ALRI and how to treat them.

For example, in training sessions with mothers, staff use the Spanish word "*FALTAN*" as a pneumonic device to help mothers remember key signs and treatment for ALRI. The letters in *FALTAN* refer to (translated): fever, food, liquids, cough, alarm and nose and each of these words is a "trigger" for a key message about ALRI.

b. Comparison of results from the baseline survey (B) to those from the midterm survey (MT) and to the DIP objectives:

1. YR 1 DIP: 42% and 48% of mothers of children with ALRI breathing difficulty will seek professional attention in Azuay and Manabi, respectively

The operational definition of "seek professional attention" includes taking the child to a MSP clinic or hospital or to a private clinic. Results for this objective are below for the percentages of mothers who sought professional attention for the child's latest case of ALRI:

	Baseline	Midterm
Azuay	38.3%	29.2%
Manabi	44.3%	46.5%
Total	41.7%	38.6%

As expected, the data reflect the fact that this is a new component and that there was a delay in implementation after the change in MSP norms. For the two provinces combined, there is essentially no change in the above indicator. The project staff are already well aware of this situation, understand the reasons for it and are intensifying their efforts in this intervention. Therefore, there is no need for a recommendation.

2. **YR 1 DIP: In Azuay 18% and in Manabi 34% of mothers will identify danger signs of ALRI**

Even though there have not been changes in practice regarding ALRI, i.e., per the objective immediately above, there have been improvements in mothers' abilities to recognize the danger signals of ALRI in Azuay, as shown below:

	Baseline	Midterm
Azuay	15.3%	31.2%
Manabi	30.4%	25.0%
Total	22.9%	28.1%

In Manabi, the results show a decrease in mothers' knowledge about ALRI. The fact that these data about knowledge are in opposite directions for each province since the beginning of the project, and that, in the case of Azuay, they are not consistent with the results about practices, suggests that mothers just do not understand ALRI very well at all and therefore may not understand the questions about ALRI during the surveys.

7. IMPROVEMENT OF VITAL STATISTICS SYSTEM (5%)

a. Comments on process activities and field observations:

In the late 1980's, a national study of the vital statistics system showed an increase in late registrations of births and deaths and a high percentage of birth and death certificates which were incorrectly filled out. In the CS V project, an inter-institutional committee was formed in Manabi to address these problems on a provincial level. This committee is comprised of representatives of: the MSP, the Office of Civil Registry, the National Institute of Statistics

and Census (INEC) and Project HOPE. They identified weak points in the registration system and established clear responsibilities and guidelines for each institution for the process and flow of information.

For example, for the MSP, the guidelines put renewed emphasis on their not-well-enforced policy that any child who was not vaccinated with BCG could not receive a birth certificate. For the Civil Registry, the guidelines stipulated that any birth certificate which arrived with incomplete data, such as lack of the signature or position of the person who filled it out or lack of the official seal of the MSP, would be returned to the MSP for completion before it would be accepted for registration.

A subsequent step was to train staff from the MSP, Civil Registry and INEC in the guidelines and how to implement them. This new process has been in place in Manabi since CS V and is functioning quite well. The Provincial MSP Director of Development and Protection is especially pleased with the results of the committee's work and highlighted these in the Evaluation Team's meeting with the Provincial Director of Health.

Besides its participation on the committee, Project HOPE, CHVs and TBAs are serving as a key link to communicate information about these new MSP guidelines to the communities where they are working. A special promotional campaign is underway nationally for the first six months of 1994 to encourage citizens to get caught up on registrations of vital statistics. The project is helping to encourage residents to take advantage of this offer during this period when the whole process is streamlined.

b. Comparison of results from the baseline survey (B) to those from the midterm survey (MT) and to the DIP objectives:

1. DIP: 80 staff of the MOH and Civil Registry will be trained in three 8-hour workshops in Azuay

Despite repeated requests to the Director of MSP-Azuay, there is no interest in participating in any project-initiated activity to improve the vital statistics system in Azuay. Unless this situation changes in Azuay, this intervention will be only be implemented in Manabi.

2. DIP: In Manabi, 167 individuals trained by the CS-V project will receive refresher training

One refresher course for this component took place in September 1992, at the end of the CS V project. Therefore, as the CS VIII project began, the next phase consisted of supervising the staff of the MSP and Civil Registry who are involved in the registration of vital statistics. Feedback from the Inter-institutional Committee on Vital Statistics reflects a substantial improvement in all parts of the system. Further refresher training is contemplated for the future and will be designed to address any weaknesses which still exist in the system.

VIII. HEALTH COMMUNICATIONS

Project activities are predominantly based in the community, focusing on health education and promotion, and expanding the provision of MSP health services. Educational materials are based on the messages in UNICEF's Facts for Life. Evaluation of the effectiveness of the educational messages (information) and the strategies (communication) is accomplished through focus groups, with discussion guides for each intervention theme, and analysis of knowledge and practice data from baseline and midterm KPC surveys. The health education messages were initially tested during focus group meetings and refined according to group feedback and community response. Monthly meetings allow staff the opportunity to share ideas and experiences, and discuss the more successful, as well as the less effective, educational messages and strategies.

Project HOPE distributes a variety of printed educational materials to MSP counterparts, CHVs, and TBAs during training, and to Peace Corps Volunteers as they are assigned to work with the project. Key among these is a set of four manuals developed by the project staff, with revisions from the MSP, based on the CS interventions of nutrition, family planning, immunizations and control of diarrhea1 diseases. The project has also developed and is using a TBA training manual. These manuals, in addition to other printed materials, have been requested and are being used by the MSP, as well as other NGOs working in the health sector (e.g., Plan International, and two local NGOs, *Ayuda* en *Acción* and *DONUM*).

The types of printed materials used by project staff are quite varied, often especially creative, and include an assortment of posters, flipcharts, graphics, recipe books, pamphlets, and story boards which span maternal and child health interventions, as well as such topics as environmental sanitation (latrines, potable water, waste disposal) and community organization. In addition, huge banners displaying both simple and more detailed health messages are used for events such as health parades and health fairs. Most materials have been developed and created by project staff, others have been donated by the MSP (e.g., a plastic pelvis/baby/ placenta model used in TBA training), Project HOPE HQ, or received in trade from other NGOs (for HOPE-developed materials). The latter include videos, slides and cassettes from *Ayuda en Acción* and UNICEF which are used during microconcentrations.

The project has been very creative in its approach to community mobilization for educational purposes and has incorporated both participatory and non-traditional education activities into its strategies. Project staff thrive on challenging mothers and cormnunity members to learn through a variety of activities such as:

- the "murgas" (complete with a band, dancers, healthy pregnant and lactating women and breastfed babies, clowns, and locally composed poetry and songs of health messages);

- the “microconcentrations’” (a community health fair where numerous health education activities, medical attention, immunizations, etc. are offered throughout the day’s event);

- nutritional cook-offs, with a focus on locally-available and/or garden-produced foods;

- games such as nutritional bingo, cards, and roulette;

- sociodramas implemented by project and MSP staff and community participants; and

- educational “television” (with animated health messages being displayed in a tv-fashioned box) and theater (with life-size and hand-held puppets).

A series of educational radio spots was developed for each intervention, using popular communication strategies, and is due to air in the upcoming months.

Some of the educational materials and supplies are distributed to project staff; others are maintained in the project office for rotating use. Staff plan and schedule their activities, and the specific educational materials they will need to implement those activities, during monthly meetings as some materials (such as the puppets and the TBA birthing model, among others) are limited in number.

The project also provides educational materials and some supplies to its MSP counterparts and to the five PCVs with which the project works (manuals, flipcharts, markers, paper, etc.). All materials reviewed were appropriate and appeared well-worn, well-used, and valued by project and MSP staff, as well as CHVs, TBAs, and PCVs with whom the project works. Judging by the positive reactions of women, men and children in the communities visited by the evaluation team, these materials are appropriately targeted, very much enjoyed, and effective in conveying the project’s educational messages.

IX. HEALTH INFORMATION SYSTEM

The project’s HIS is the same for both provinces. Due to the overall number of communities involved, the HIS is managed separately in Azuay and Manabi. However, the data can be

transferred between provinces and combined when necessary to produce results which reflect the entire target population.

The components of the HIS include:

1. Monthly activity form for each canton

This is filled out by each nurse and includes a narrative description of the work undertaken

for the month. In addition, for each different intervention (e.g., immunization, diarrhea, etc.) there are tallies of the types of activities implemented (e.g., group meetings, home visits) and the numbers of different groups of people (e.g., TBAs, pregnant women, community leaders) who attended each activity.

2. CHV reports

The CHVs keep on-going records which are collected when they encounter project staff, usually during supervisory visits and/or during training sessions. One form used by the CHVs is to record educational activities, by subject (e.g., diarrhea), by format (community meeting or home visit) and by total number of people in attendance. The other form tracks direct interventions by the CHV, focusing on the distribution of ORS and references for various illnesses.

3. TBA reports

The TBAs keep records which are submitted to the project staff and to the MSP approximately once every three months, during their meetings at the MSP. The TBAs track six different items: prenatal visits, deliveries, post-natal care to mother, follow-up of newborns, deaths of infants under seven days old and maternal deaths.

The form used by TBAs does not necessarily require literacy, as there are pictures used for each category. TBAs also have a booklet, similar to a receipt book, which has the same pictures. For each reference the TBA makes, she tears out one part of the page, marking the reason for the reference, and makes the same mark on the remaining part of the page. The former part goes with the mother to the MSP; the latter stays with the TBA for her records.

4. Report on Microconcentrations

Given that the "micro" activity may attract up to 300 people for one day's health activities, the data collected are not as detailed as those for individual visits. For "micros", the data collected by project staff include the types of promotion or training, the number and types of immunizations given (obtained from MSP staff at the end of the session), the number of children weighed and the number of medical consultations (also obtained from the MSP Staff).

5. Growth Monitoring

Longitudinal weight data are kept for individual children in the HIS, including the month weighed and designation of "normal" or "malnourished" (i.e., < 2 S.D. of the PAHO weight-for-age norms). There is a lot of time invested in providing data for and maintaining these records. Since the individual children are not being followed for research or clinical purposes, it does not seem necessary to keep such detailed growth data. Furthermore, these data are not necessarily needed for evaluating the DIP objective for growth monitoring, as the

office. The coordinator then prepares a plan for the allocation of equipment and materials and any extra human resources necessary to deliver the equipment and/or implement a given activity.

In both Azuay and Manabi, the CHVs and TBAs have been given the following items to facilitate their work:

- Manuals developed by the project on four major interventions: nutrition, immunizations, control of diarrhea1 diseases and family planning;

- Pamphlets and brochures prepared by others on such topics as: care of the mother and newborn; acute respiratory infections; environmental health; popular teaching techniques; surveys; gardens; first aid; and the community and the health volunteer;

- A set of large cards - about 5x9" each - printed with the key health education messages and a plastic cover for them; the evaluation team observed these in use during a question & answer game at a meeting of CHVs and TBAS and also used as prompts for the speaker at a "murga";

- Identification badges which present their name and title. The badge has the logo of the MSP in one comer and Project HOPE in the other.

- A one-liter pitcher for demonstrating how to make ORS (just to CHVs). Also, CHVs were given a sign to place outside their homes to inform others that their house was a distribution point for ORS packets.

Major equipment items which are part of the team's resources include: three slide projectors; one film projector; two cassette tape recorders; four megaphones; two VCR's; one television; two amplifiers; two overhead projectors; two screens; approximately one dozen computers and printers; and four vehicles.

As the team travels into a community, a loudspeaker mounted on top of a jeep can broadcast the initial information about what will happen that day and where. Once the team has reached the site, usually a school and the surrounding grounds, the amplifier, speakers and microphone are used to repeat the announcements and then during the day to play short tapes with health education messages. This broadcasting equipment is particularly crucial for and effective in calling people together for the day's activities in a given community. Given the dispersed nature of the houses, a loudspeaker can provide sufficient volume and information to invite them to the central place where that day's health activities will be implemented.

Project staff also have a library of educational and technical references in each province. These are supplemented by relevant technical documents sent from HOPE Center on a regular basis. Materials developed by HOPE projects in other countries have also been added.

VI. HUMAN RESOURCES

A. TEAM COMPOSITION

There are a total of 37 Project HOPE staff working on this CS VIII project: 20 of them work in Azuay, 16 in Manabi and the Director divides his time between both provinces. The team in Azuay is complemented by nutrition students who do a six-month internship with Project HOPE during their final academic year. Every six months, one group of five students leaves the project and a new group of five begins. Similarly, in Manabi there is one social work student doing an internship with the project. Initially, four Peace Corps Volunteers were working directly with the project, however, by the time of the MT two of these had left. Then, three new volunteers joined the project, making the current total five (3 in Azuay and 2 in Manabi).

In addition, during the "micro" activities, there are MSP personnel who join the team. Most often the MSP staff who participate in field activities are the doctor and auxiliary nurse from the rural health sub-center. In other cases, the MSP representatives are the doctor and community nurse from a larger health center or the cantonal hospital.

At the community level, the project teams are amplified by CHVs and TBAs:

	# CHVs	# TBAs
Azuay	93	89
Manabí	92	99
Total	185	188

The turnover rate of these volunteers is relatively low. For example, of the 124 CHVs trained in Manabi, 32 are no longer working. However, 17 of these 32 have either moved or died. If these 17 are removed from the sample, then the rate of loss of volunteers who choose to no longer participate is 15/107, or 14%.

B. DMSION OF RESPONSIBILITIES

Each of the two project teams is structured similarly. There is a registered nurse who is stationed in each participating canton (six in Azuay and six in Manabí) who coordinates all of the project's activities in that canton. In addition, each team has a nutritionist, social worker and agronomist who participate in the field activities, dividing their work among the six cantons upon request from the nurses. One additional nurse provides support and supervises the individual nurses in each canton. Each team is complemented by the HIS manager, administrative support, drivers and the overall provincial coordinator. The two provincial coordinators are also nurses who first worked at the canton level. In addition to their

managerial and administrative functions, each one spends a considerable percentage of her time, often on weekends, out in the field with her staff.

Of particular note is the contribution of the drivers. Each one of them, in addition to his driving responsibilities, also takes direct part in the field activities. Once the team arrives at its destination, the drivers actively participate in all aspects of the day's activities, from setting up equipment, to cutting up vegetables for the salad, to helping to weigh children. One driver in Azuay is particularly skilled in filming and is in charge of making videos and radio spots for the project.

Each member of both teams is exceptionally dedicated, motivated and eager to learn. Their creativity in developing materials (see Section VIII) is remarkable and their flexibility in dealing with the unexpected is a major contributor to their success. Each nurse and CHV is responsible for implementing five major project interventions, i.e., immunization, diarrhea, nutrition, care of mothers and ALRI. The agronomist and nutritionist provide special help in the area of vitamin A (for gardens and demonstrations, respectively) and the social worker in training. However, each team member -- including the drivers -- is expected to understand the basics of each intervention so that she or he can provide continuous and consistent health messages to participating families. The CHVs are also trained to be multi-purpose health workers.

Many staff members have had the opportunity to participate in various types of training activities to improve their knowledge and practices in their areas of responsibility. The Annual Report for Year 1 included a list of 16 training events sponsored by others which the staff had participated in until that point. Since then, members of the Project HOPE staff have received additional training from the following:

A course on the general vision of working with women beyond literacy, held in Cuenca in October 1993, sponsored by UNESCO, the MSP and the Ministry of Education and attended by three project nurses (Licda. Claudia Tello; Licdo. Norman Villota; Licdo. Arturo Cruz);

A course on group dynamics and the campesino reality, held in Cuenca in October 1993, sponsored by Project HOPE and attended by all the staff of Project HOPE-Azuay and three representatives from the team in Manabi;

A course on Total Quality, held in Quito from December 15-17, 1993, sponsored by the consortium of North American NGOs and attended by Licda. Zaida Crespo, Licda. Lucia Ortíz, Licda. Lucia Peiia and Licdo. Paul Moscoso;

An m-service workshop to train staff from Project HOPE, CARE and APROFE in the implementation of the Midterm Survey.

For the future, Project HOPE's HQ is planning a workshop for staff in Latin America, to be

held in Cuenca in June 1994. The workshop will devote four days to "Programming for Results" and two days to "Adult/Popular Education Methodologies". Scheduled to attend are the Director, two provincial coordinators and a cantonal nurse. A similar workshop on sustainability issues will be held in Guatemala in 1995.

In addition to attending workshops sponsored by others, each team holds a monthly in-service training. In these meetings, the team members take turns presenting topics which they have prepared for discussion. In addition, work plans for the month are presented and administrative matters addressed.

One shared characteristic of all project staff is their interest in reviewing their work and learning how they might improve. When given useful guidance, they then seek to apply it. For example, the Final Evaluation document for the CS V project concentrated on outputs and only reported on one coverage indicator (TT2). In contrast, an indicator of this team's maturation as development professionals is reflected in their progress in understanding and using data to improve their work: in just 12 months, each team member has become conversant in the data relative to her or his area of responsibility -- i.e., size of the target population, monthly targets and monthly accomplishments, key messages in all interventions, outputs and outcomes, and rate of change in various indicators since the baseline. They are aware of the project's weak areas and seek guidance for improving them.

C. COMMUNITY HEALTH VOLUNTEERS AND TBAS

The CHVs and TBAs are responsible for collaborating with the project staff and MSP in implementing activities related to the interventions in their communities. Their responsibilities include distributing ORS and teaching mothers how to use it, assisting at the "microconcentrations", making home visits, referring people to the health center for additional care, informing their communities about up-coming project activities, promoting the project and its health education messages, participating in community events, training and in-service meetings sponsored by the MSP and the project and keeping records of their work for submission to the MSP and project staff.

In Manabi, a total of 19 courses (including initial training, two-day follow-up and monthly in-service) have been implemented for TBAS, with a total of 228 trainees. In Azuay, there was one initial course for TBAS, 41 follow-up and in-service courses and a total of 344 persons in attendance.

VII. MATERIAL RESOURCES

Each project team has created a vast supply of materials to use in their community visits and in training sessions (see Section VIII for more details). The evaluation team observed a number of these in use and was shown others in the office. On a monthly basis, each cantonal nurse plans her/his field activities and requests specific materials from the provincial

latter can be assessed by looking at a child's growth chart during the B and MT surveys and seeing if the child has been weighed in the previous three months.

6. Monthly, Trimesterly and Annual Summaries

Every month, a summary of all activities is prepared for each province. At this point, the monthly achievements are compared to the targets for that month and discussed with project staff. These sumrnaries are also shared with counterpart staff and HOPE Center. In a similar fashion, the HIS is used to tabulate trimesterly and annual figures for reports which are shared with counterpart staff, HOPE Center, USAID-Ecuador and AID/PVC.

7. Baseline and Midterm Surveys

Results of the Baseline and Midterm Surveys formed a key part of the analysis of the project's accomplishments which are presented in Section V.B. In the course of using these data, several issues emerged which merit consideration for follow-up:

A. Calculations of overall project progress

The current HIS does not routinely provide data which combine the results from both provinces. Such data which represent "the overall picture" would be useful to:

- present a more solid and cohesive picture of the project to outsiders who do not need to appreciate the differences between Azuay and Manabi;
- accurately represent the combined efforts and successes of the two teams;
- present a more integrated picture of the project to the two provincial teams themselves, to increase their appreciation of the project's common interventions and overall achievements; and
- facilitate the work of the team which undertakes the Final Evaluation.

B. Calculation of percent change

Progress towards meeting the project's objectives should be calculated as a percentage in addition to showing the absolute difference in percentage points. For example, in Azuay , the project's HIS report on the comparison between the B and MT shows that, "the coverage of mothers with maternal health cards was 11 .O% at B and 46.9 % at MT, giving an increment of 35.9%". However, calculated as a percentage relative to the baseline, the increment is 326%, from the calculation of 46.9 - 11 .O / 11 .O. Future presentations of changes in key indicators should also include this calculation of percent change.

C. Qualitative evaluation of the project

One of the concerns of the HIS manager in Manabi is that the HIS does not capture qualitative aspects of the project's challenges and its accomplishments. Stated another way, the team agrees that the data collected for the B and MT surveys do not adequately reflect the breadth and depth of their activities nor the level of investment necessary to reach their goals. Also, each one of them can tell about personal experiences which demonstrate the radical changes which have occurred in specific participating families and various counterparts.

In a project with such rich experiences as this one, it is not surprising that the staff wish to have these experiences documented for the "permanent record". The B and MT surveys cannot fulfill this need, nor were they intended to. Although project staff submit monthly reports on their activities, this format may not lend itself to reporting on the noteworthy anecdotes of their work. Nevertheless, given the progress already recorded at the time of this midterm evaluation, there is legitimate concern that some mechanism be implemented to adequately document the qualitative accomplishments.

In fact, such anecdotal descriptions of a few of the project's challenges and accomplishments were presented as Annex 2 of the 1993 USAID Health and Child Survival Project Questionnaire, dated 9/27/93. During interviews with project staff, the evaluation team heard numerous anecdotes which deserve to be documented in some form, e.g.,

- the mother who, soon after learning about the importance of vitamin A, prepared a soup which included dark green leafy vegetables and served it to the schoolchildren;

- the mother who learned about reinitiating lactation, and whose youngest child was 10 years old, took over the care and breastfeeding of her nephew, who had lost his mother at the time of childbirth;

- communities which began to add salads to the typical meals of rice and eggs which are offered to project staff, after learning that a balanced meal includes foods from all food groups;

- the CHVs and children who walked four hours to the Health Fair in Girón, Azuay, because a landslide had blocked the normal route;

- the mother who, after just one visit from the project's social worker, decided to stop using a bottle and made a point to tell this to the social worker during the next visit;

- the mother who became convinced to take her youngest child to be vaccinated, against the wishes of her husband, because an older child had been the victim of a poorly applied DPT vaccine in the thigh and was left paralyzed in that leg;

- the mother who took her child to the doctor after three days with diarrhea and told the

doctor, who wanted to prescribe antidiarrheal drugs, that she did not want them because she knew that they were not appropriate; and

- the 17 mothers, some of whom had walked three hours in order to participate, who prepared original recipes using vegetables from their gardens and brought samples to the nutrition contest held at the "microconcentration" in San Sebastian, Manabi, on February 19, 1994.

Since the staff are interested in having this documentation, and know that the current HIS does not capture it, they will need to determine how they are going to make this happen. Various overlapping options they might consider are: having the staff include such anecdotal information with their monthly reports, to be taken out and compiled separately in a subsequent step; having the students associated with the project take turns interviewing the staff to document the information; choosing a selected sample of anecdotes to document by video, having the actual participants and counterparts tell their stories; and preparing a scrapbook of these anecdotes, with pictures.

RECOMMENDATIONS

1. Consider suspending the collection of weight data for entry into the HIS.

2. For key project indicators, calculate figures which represent the combined results of Azuay and Manabi and present these figures in appropriate meetings and documents (e.g., reports, meetings with counterparts and NGOs at the national level, Final Evaluation).

3. Progress in key indicators should be calculated as "percentage change" in addition to the "difference in percentage points".

4. Develop an on-going process for documenting the qualitative nature of Project HOPE's experiences to complement the quantitative data managed by the HIS.

X. TECHNICAL ASSISTANCE

This CS VIII project has an in-country MCH consultant, Dr. David Nelson, who first provided technical assistance to the predecessor CS V project. Since Dr. Nelson lives in Quito, he is able to serve as a link between the two project's provinces and maintain contacts with the MSP and other NGOs at the national level. More information about Dr. Nelson's assistance to the project, and that of five other consultants, was presented in the Year 1 Annual Report.

The technical assistance which has been requested appears to have been appropriate and the staff reports that is has been useful. For example, the former Assistant MCH Director from HOPE Center trained the Manabi staff for implementing the Final Evaluation survey for the

CS V project. Members of this staff then assisted their colleagues to implement the same survey in Azuay. Neither group needed outside assistance when they recently repeated the survey in both provinces for this Midterm Evaluation.

Since the Annual Report (November 1993), the project has received technical assistance through training which various staff members have undertaken. These events were listed in Section VI, Human Resources.

On an on-going basis, the Video Coordinator in Azuay receives assistance from a local university where he uses the equipment to edit videos for the project.

Depending on the course which this project will take for its second half, there may be a need for technical assistance in designing strategies for sustainability, including indicators and processes for monitoring and evaluation thereof. Further discussion of this topic is found in Section XIV. Sustainability.

XI. MONITORING AND SUPERVISION

A. OF FIELD STAFF AND STUDENTS

Each provincial team has two people with responsibilities for supervision -- the provincial coordinator and one nurse supervisor. In Azuay, the latter has direct supervisory responsibilities for two project nurses and all activities in their two cantons. In Manabi, the nurse supervisor works in all cantons, rotating her time according to need.

All four supervisors perform multiple roles while interacting with the field staff: by their very presence, they observe the work of and provide emotional support to the project nurse, MSP staff, CHVs and TBAs who are also involved in the activity; they lend a hand doing whatever task needs extra help; they give messages of encouragement to the community members present; they serve as an information and supplies link between the field staff and the provincial office; they help resolve problems among project staff, the MSP, CHVs and TBAs; they reinforce the health education messages of the day; they tactfully make suggestions for "correcting" a respondent's answer if it is not accurate; and they provide a positive role model for everyone. Of all of these roles, the two which are seen by the coordinators as most important are reinforcing the collaboration between the MSP and the staff and providing encouragement to everyone.

During the monthly staff meetings, the supervisors raise issues about the activities they participated in and also discuss issues raised by the field staff. In both provinces, the supervisors are very much in touch with the project's community-level activities as they often spend weekends, in addition to available weekdays, in the field, Weekdays spent in the provincial capital provide crucial opportunities for maintaining contact with MSP counterparts who work at that level.

In order to encourage her staff to become acquainted with the design aspects of the project, the provincial coordinator in Manabi gave a series of two quizzes, each with a pre- and post-test. The questions included, "What is the Year 1 goal for ALRI for mothers? What is the total target population in Manabi? What was our baseline coverage rate for ORS usage?" The staff were taken by surprise, but almost without exception, responded positively, took the quizzes seriously and made great improvements in their scores by the second quiz.

The Project Director lives in Cuenca and spends approximately 7-10 days per month in Manabi. In each province, he balances his time quite satisfactorily among making visits to the field with staff, office work and meetings with counterparts and other key groups. Whether in Azuay or Manabi, the Project Director maintains close communication with staff in the other province. Since Project HOPE has no office in Quito, the Project Director also represents the organization at meetings at the national level.

B. OF MSP, CHVS AND TBAS

The whole field team is involved in the supervision of the MSP's auxiliary nurses, CHVs and TBAs. By working right with these persons, the project team members can facilitate the correct implementation of MSP norms, e.g., knowing the (few) contraindications for giving irnmunizations and how to correctly plot a child's weight on the growth chart.

During these visits, one member of the team can talk to the CHVs and TBAs about what has happened in their communities since the last visit, discuss any current problems, review their written records and make plans for the next visit. Also, depending on the level of training of the local CHV or TBA, one of them might be called upon to give a short talk on a particular health education topic.

Given that the project field nurses live right in the canton where they are working, they get to know the local MSP staff and communities very well. Visiting CHVs and TBAs use the project nurse's houses as central points for communication purposes, receiving supplies of ORS and dropping off their reports of field activities.

XII. RELATIONS WITH COUNTERPARTS

Two of the most impressive aspects of this project relate to its counterparts --

- the change in all relationships connected with the MSP and
- the number, diversity and contributions of other counterparts.

A. RELATIONSHIP WITH THE MSP

The MSP is Project HOPE's chief institutional implementing counterpart while the CHVs and TBAs are the community-level implementing counterparts. Without either group, the project could not function, as Project HOPE's role is ultimately to enable these groups to implement

child survival interventions with the target groups. While the MSP was also the institutional counterpart during the predecessor CS V project, the relationship with that project was quite distant and activities were implemented in parallel fashion in the two provinces. The relationship between the MSP and the CHVs and TBAs was also distant and admittedly hostile in some instances.

One of the key recommendations of the Midterm Evaluation of the CS V project was to improve the relationship with the MSP. This recommendation was taken seriously and subsequently, major efforts were made to demonstrate the project's work, its accomplishments and its desire to integrate with the MSP. Since the project also works with CHVs and TBAs, their relationship with the MSP was equally important. Concurrent changes in the local leadership of Project HOPE also facilitated this entire process.

From the Midterm Evaluation of CS V to this Midterm Evaluation of CS VIII, the project's relationship with the MSP has changed radically. In fact, **what was identified midway as the greatest weakness in CS V -- counterpart relations -- is now a major strength of CS VIII.**

A full description of the process of change in this relationship and its current status is not possible in this document. However, a few examples can illustrate the nature and depth of the respectful, collaborative and productive relationship which the project and MSP now enjoy:

- The respect which the MSP has for Project HOPE is reflected in the MSP's concern for being accountable for their part of the activities which are implemented jointly with Project HOPE. For example, for the "micro" in San Sebastian, Manabi, the local MSP doctor could not come at the last minute because his mother was sick. The MSP sent a doctor from a neighboring sub-center (one hour away). The local MSP nurse also could not come because she had had a baby just six days before, so the MSP sent a nurse from the cantonal hospital (1.5 hrs away);

- Project HOPE provides technical support to many MSP-sponsored training events. For example, over a three-month period (Oct. - Dec. 1993), project staff in Azuay and Manabi were members of the training team and/or speakers at five such events. On an on-going basis, the MSP asks project staff to participate in MSP's health fairs;

- In both provinces, the MSP provides office space, electricity, water and some furniture for the project;

- In several cantons in Azuay, the MSP provides transportation to project personnel on a regular basis;

- When either Project HOPE or the MSP has a last-minute need, e.g., for a vehicle, driver, supplies, equipment, etc., they know they can count on the other group to help

out as much as possible;

- During the first year of the project, there was an extremely disastrous landslide in Azuay (called Josefma) which then caused major flooding over a huge area. The MSP called on Project HOPE to organize and manage all emergency activities in one entire sub-county area. The excellent work performed by the team in carrying out this special request, which lasted for over a month, earned the staff the confidence of all the personnel of the MSP;

- In Azuay, the MSP doctors and nurses who are cantonal chiefs meet monthly with project staff to plan their joint schedule of activities; MSP hospital personnel are added to the team in cases where the MSP health subcenters have no nurses or doctors;

- The MSP has included Project HOPE in preparing the MSP's Annual Plan for both provinces and with all Health Areas within the provinces, as it considers the work of Project HOPE as part of the provincial plan;

- In Manabi, the MSP has begun to take over the financial responsibility for some of the project activities in several cantons (see Section XIV. Sustainability, for more details);

- The MSP's provincial Director of Community Development in Manabi determines the placement of new rural health personnel based on the project's needs;

- The MSP in Manabi asked Project HOPE to be a member of the Provincial Child Survival Committee;

- "The [MSP] Counterpart sees the project as one of the MSP's own programs" (a quote from Project HOPE's coordinator in Manabí) and "The MSP is committed to help out in everything that is necessary so that the project can carry out its programming without difficulty" ; and

- The Director of the MSP Health Center in Santa Ana, Manabi, while participating in one of the in-service meetings with CHVs and TBAs, professed that he is very pleased that the former cold relationship between them and the MSP is now over. He went on to say, "What we've gained in one year [working with the project], we never dreamed it could be possible".

B. OTHER COUNTERPARTS

Besides its main implementing counterparts, the project enjoys mutually collaborative relationships with other groups who support the CS VIII project's efforts. Some of these

relationships were developed in the course of working together after the "Josefina" landslide and flood in Azuay in March 1993; others have been developed in specific cantons for pooling resources for specific activities in individual communities. Given the number and examples of these types of relationships, it appears that project staff are particularly adept at seeking such collaborative opportunities or identifying them when they are least expected. Some examples of the project's other counterpart relationships are:

- working with SOLCA and APROFE (see Section V.B.5. Care of Mothers);
- working with World Vision to build a health sub-center in Guayabales, Manabi;
- connecting with a CARE latrines project in Montecristi, Manabi, resulting in the installation of 1,500 latrines in communities where the CS VIII project is also working;
- establishing an internship program for nutrition students at the University of Cuenca to do fieldwork with the project;
- establishing an internship program for three nursing students at the Catholic University of Cuenca;
- experimenting with the effectiveness of training children to be health promoters, by working in two schools in Azuay with the Child-to-Child Foundation and training teachers, children and community members;
- training and incorporating Peace Corps Volunteers as members of the project team in both provinces;
- soliciting the assistance of three private physicians to work as volunteers during the "micros" or cormnunity health days when the MSP does not have enough personnel;
- collaborating with the Ministry of Education in training school teachers to create demonstration gardens so children can take seedlings home to their own garden;
- collaborating with Plan International and Ecuadoran NGOs (*DONUM*, *Sendas* and *Ayuda* en *Acción*) in the training of CHVs in Azuay and discussing the possibility of developing a single training and supervision program for all CHVs in the future;
- engaging the assistance of staff of other NGOs for KPC surveys;
- establishing and maintaining good professional relationships in both provinces with the Association of Rural Nurses and Association of Rural Doctors;
- in Manabi, working in communities with the added expertise of the Oswaldo Loor

Foundation, which is specialized in the prevention and treatment of visual problems;

- participating in reinvigorated or new cantonal MSP health committees with representatives of the MSP, NGOs, local government and the church; and

- coordinating with the Military Hospital in Azuay to provide health staff and supplies for "micros".

All of these examples show how the project is leveraging its resources in Azuay and Manabi in a mutually beneficial way -- the expertise and resources of other groups are brought to bear on the project's own target population and in turn, the project's expertise and resources are shared with health professionals, NGO staff and community residents beyond its original target area.

XIII. RELATIONS WITH HEADQUARTERS

Project HOPE-Ecuador's communications with its USA Headquarters (called HOPE Center) are in three main areas:

A. FINANCES AND ADMINISTRATION

The CS VIII project has developed a financial monitoring system which allows it to compare monthly expenditures against the annual budget prepared at HQ, based on the DIP. In addition, comparisons of expenditures against the budget are made for other time periods, such as quarters or an entire year.

The fact that the majority of the staff who work with CS VIII, including the Director, two provincial Coordinators and Administrator, also worked with the CS V project, greatly facilitates the processes of financial disbursements, budgetary monitoring and administrative flow with HOPE Center.

B. TECHNICAL SUPPORT

There is excellent and fluid communication between the project and those staff at HOPE Center who provide technical support. The support which the project has received from this group has been of high quality and immediate application and includes the following:

- The technical direction for the execution of the Final Evaluation and Baseline surveys for CS V held in Manabi and training of project staff for the subsequent implementation of these surveys in Azuay;

- Assistance in the Final Evaluation of CS V provided important information for the design of the DIP for the current project;

- Assistance in the refresher training of the Provincial Coordinators for CS VIII, especially in the development of action plans and management of human resources;

- A public health intern who revised the curriculum, manual and training materials about diarrhea, organized and developed a training module for Environmental Sanitation, and evaluated the field staff's skills in the application of educational techniques;

- The visit and assistance of Jeff Waller, Director of the Americas for HOPE Center, was important for the re-analysis of the project's target population, resulting in a request to AID/Washington to reduce the population in number and scope (see the Annual Report for Year 1);

- Elaboration of the Baseline Survey report, DIP and trimesterly reports for AID;

- Provision of up-to-date technical material on a monthly basis about the specific interventions of the project; and

- English translation by HOPE Center of HOPE-Ecuador project documents which are then submitted to AID.

C. WORKSHOPS

Staff from Project HOPE-Ecuador are invited to attend workshops sponsored by HOPE Center for all four Latin American countries where Project HOPE is working. The Director and Manabi HIS manager attended a workshop at HOPE Center in July 1993 on the topic of HIS. Two more similar workshops are planned (see Section VI, Human Resources) in which representatives from HOPE-Ecuador will host, co-facilitate and participate.

XIV. SUSTAINABILITY

A. INTRODUCTION

The Child Survival Program's long-term and serious concern about sustainability has been a major factor in encouraging PVOs and their counterparts to address this issue in the design and implementation of projects. Three major dimensions of sustainability will be considered in the discussion below:

- institutional - The capability of a health provider (usually the counterpart) and resources (specifically infrastructure, staff, administrative systems and stature) to provide effective services on a permanent basis without outside help;

- financial - The ability of a provider to generate enough income to support itself when AID funding is no longer available; and

- attitudinal - The willingness of a provider to engage in serious and productive discussions and to develop and experiment with alternative options to address institutional and financial sustainability.

Unless otherwise indicated below, the providers for whom "sustainability" is desired in this CS VIII project are the MSP, CHVs and TBAs. Most of the discussion focuses on the MSP because of its role in supporting the TBAs and CHVs. These three dimensions of sustainability -- institutional, financial and attitudinal -- are usually present to some unequal degree in the counterpart at the beginning of the project. One major challenge for the PVO, therefore, is to facilitate the further development of all three dimensions over the life of the project.

B. SUSTAINABILITY INDICATORS IN THE DIP

The sustainability strategy as presented in the DIP lists the following indicators which will be used to monitor progress in sustainability:

- Number of health staff trained;
- Percentage of health staff trained that are involved in supervision and follow-up of CHVs and TBAs;
- Percentage of trained CHVs and TBAs that are active and making referrals;
- Number of women/mothers' clubs meeting monthly;
- Contributions of the communities towards the training of the CHVs;
- Number of nursing and nutrition students receiving training in community health by working with the project.

If the concept of sustainability includes the idea that certain identifiable things (e.g., practices, activities, norms, systems) should be continued after the project's resources are withdrawn, then the first and the last indicators listed above are not applicable. They are outputs, i.e., number of health staff and number of students trained. As such, they are intermediate steps towards sustainability, as the crucial issue is to what extent how many of these persons trained by the project continue to implement certain tasks at a certain level of performance after they are no longer associated with the project.

The remaining indicators listed are appropriate ones which can actually be measured during the project in order to assess the sustainability potential for a given community and its local MSP counterparts. However, as yet no target numbers (absolute or percentages) have been assigned to these indicators, for annual increments or for the life of the project.

The DIP objectives which are being monitored closely and evaluated in the B and MT are those of the KPC for the six specific interventions. The project has developed intermediary outputs to reach these objectives (e.g., training mothers, CHVs and TBAs), but has not yet developed any complementary sustainability objectives for the maintenance activities of the CHVs, TBAs and MSP without the presence of Project HOPE.

RECOMMENDATION

1. Calculate the Midterm status of the sustainability indicators already listed in the DIP. Then, assign numerical target values for each one which represent the expected status of the indicator for Year 2 and Year 3. Track these in the HIS and prepare graphs for them similar to those for the other interventions.

C. PROGRESS TOWARDS SUSTAINABILITY

Despite the lack of formal monitoring of the specific DIP indicators for sustainability, there is clear and concrete evidence from both provinces to suggest that progress is being made towards sustainability on a community-by-community or canton-by-canton basis. Examples of activities which have been supported by the project which are ready to be taken over by counterparts are:

1. Canton Santa Ana, Manabi

Project staff have been working with the MSP at the Health Center in Santa Ana to train the CHVs and TBAs who work in this canton. Over the past year, the MSP has gradually taken over the responsibility of organizing and running the in-service meetings when the CHVs and TBAs come for refresher training, supplies, to submit their reports and to discuss any problems they have encountered.

Project HOPE currently supports this process by paying the cost of the TBAs' and CHVs' transportation to the health center, and contributing to the dynamic of the meeting by assisting with a variety of adult education techniques. The MSP is very interested in continuing these meetings, and its staff have developed an excellent rapport with the CHVs and TBAs. Normally, the CHVs meet for a half day once per month at a cost of S./ 40,000 ($20) and the TBAs meet for two days every three months, at a cost of S./ 220,000 ($110). However, the MSP says it does not have the budget for the transportation and per diem which the project currently supports.

2. Canton Santa Isabel, Azuay

The MSP staff from the cantonal hospital in Santa Isabel, Azuay, have collaborated with project staff in implementing "micros" in various communities. The MSP staff appreciate the need for such outreach and wish to continue with this activity. They have the EPI supplies and other supplies and equipment for this type of community work. However, the major impediment is transportation. The cost of renting a taxi for the day is S./ 36,000 (approx. US $18).

In both of these cases, the MSP is motivated and has the institutional capability to continue providing the new service which it developed (or reinvigorated) with Project HOPE's help. Obviously, once the MSP takes over these activities, they will not be implemented exactly as

they are now with Project HOPE's personnel present. Nevertheless, both Project HOPE and the MSP in these areas believe that these activities are ready to be turned over to the MSP. In both cases, a relatively small amount of money is the obstacle.

Other indicators of the MSP's capability for institutional, financial and attitudinal sustainability are:

- Once Project HOPE helped the MSP make progress in improving the registry of vital statistics in Manabi (see Section V.B.7), the MSP paid the majority of the costs for training its provincial staff in the new policies and guidelines;

- On February 28, 1994, the MSP, CHVs and TBAs in Ludo, Azuay, are going to meet to plan the activities which will take place in the interval between visits of the project staff;

- In Santa Isabel, Azuay, *Proyecto Norte* (a local NGO) and the Ministry of Social Welfare provide transport to MSP and project staff in order to provide health services and education to rural communities and children and personnel of day care centers;

- In the cantons of Calceta and Montecristi, Manabi, the 1993 budget of the MSP financed one in-service meeting with TBAs and similar funds are budgeted for 1994;

- In the cantons of Junín and Pichincha, Manabi, the 1994 MSP budget includes funds for two meetings per year of two days each for the TBAs; and

- In the six cantons where the project is working in Azuay, it is becoming commonplace for the MSP personnel to be making regular plans with CHVs and TBAs for activities (e.g., their monthly in-service meetings and regular or special health services) in the local health centers and surrounding communities.

The examples above show clearly that the MSP considers sustainability a serious issue and is capable of pursuing this even further during the second half of the project. The time is ripe for the project to capitalize on these positive examples where sustainability -- in all three dimensions -- has indeed happened, or is very close to happening, in order to build even more momentum for the future.

D. FUTURE OPPORTUNITIES FOR SUSTAINABILITY

During the course of the Midterm Evaluation, members of the team engaged in numerous discussions with project and MSP staff about bonafide examples of sustainability to date and ideas which could be pursued in the near future. Without exploring the advantages and disadvantages of each, the current ideas for pursuing sustainability (on different scales) include the following, some of which are already under serious discussion:

- Expansion of Project HOPE's Community Health Banks in Manabi to those cormnunities already working in CS VIII. Some of the capital generated by these banks is destined for community-wide health activities and could include purchase of vegetable seeds and/or support for the CHV (see Appendix 5 for more information);

- FASBASE (*Proyecto para el Fortalecimiento y Ampliación de los Servícios Básicos de Salud en el Ecuador*) - This is a new seven-year MSP project, funded by a World Bank loan which will start in June 1994 to support the MSP infrastructure and programs. It will operate in 40 of Ecuador's 187 health areas, including Azuay and Manabi. A new level of health worker will be created -- the community health auxiliary. Discussions are under way between FASBASE and NGOs working in the cantons of Paute and Santa Isabel, Azuay, about the transfer of specific activities, such as CHV training and follow-up, from the NGOs to FASBASE. In addition, in Paute, FASBASE will select 18 of its new health auxiliaries from among the CHVs already trained by NGOs in the area.

- The Catholic priest in Ludo, Azuay, is responsible for the church's activities in the surrounding *parrochia* (sub-division of canton). He is particularly supportive of the project's work with the MSP, CHVs and TBAs and is anxious to develop mechanisms to continue these activities.

- The MSP's Director of Community Development for Manabi is another ardent supporter of the project and would like to develop strategies for re-directing current funds within the national MSP budget for Community Development to increase support for Manabi's outreach efforts. A variation on this option is for the MSP to develop a proposal for external funding to address the increased demand developed

  during the project (e.g., the Health Center in Santa Ana had an average of 30 prenatal consultations per month before the project; now the rate is reported to be 30/day);

- The five-year MSH-MSP Child Survival project will end in December 1994, with some unused funds. Project HOPE, CARE and CRS are developing a proposal for taking the leadership role in using these funds to train other NGOs how to work more collaboratively with the MSP;

- Fundraising events to raise the money necessary to continue the CHV and TBA meetings held at the MSP (described in section C immediately above);

- The Director of the Health Center in Junín, Manabi, believes that TBAs would be willing to pay their own transportation to the MSP meetings if the activity were understood by them as "renewing their license" to practice; in contrast, he believes it would be much more difficult for the CHVs to pay their transportation because they do not receive any remuneration from their clients the way the TBAS do; he would like to see the meetings between the CHVs and MSP continue without transportation

cost to the MSP;

- The Director of the Health Center in 24 de Mayo, Manabi, believes that his staff are completely capable of continuing the project's activities, but lacks the finances to do this with the same intensity and effectiveness;

- The MSP staff from a sub-center in the canton of 24 de Mayo stated that the principal obstacles in conducting community outreach activities are the orders from their superiors which prohibit them from leaving their facility; and

- Train MSP staff in project design and proposal preparation.

E. PLANS FOR THE REMAINDER OF THE PROJECT

The examples above which reflect the MSP's current capability to sustain specific project activities and their future potential are indeed signs of remarkable achievement in just one year. With the data from the Midterm Survey now available, the project staff and its counterparts need to move from discussions about just sustaining activities, to discussions about sustaining change -- i.e., preserving the new levels of accomplishments made in improved health knowledge, practices and coverage (i.e. the absolute changes) and preserving and developing even further the new processes which nurture these changes.

However, in order for the current project staff to engage in serious discussions about sustainability and pursue the ideas generated, they would need to reduce other activities. For example, if the project's cantonal nurses in Santa Isabel or Santa Ana were to pursue discussions about developing fundraising strategies for sustaining the MSP's outreach

activities described for these two cantons in section C above, they would have to seriously reduce their direct community-level activities for the rest of the project.

The question then becomes, **should Project HOPE divert some of its on-going efforts in community-level implementation to work with the MSP and other counterparts to develop and experiment with specific models of sustainability?** It is clear that conditions are ripe for potentially making substantial progress in sustainability, and the financial dimension appears to be the key barrier. If Project HOPE and its counterparts choose to pursue this line of thinking between now and February 1995 (the end of the project) it will be necessary to decide, in each canton (or community):

- exactly what do they think should be sustained, by whom, and with what frequency and degree of quality? e.g.,

- monthly (or quarterly or twice/year) meetings of the CHVs and TBAs?
- monthly visits of the MSP outreach team to a given community?
- coverage rate for BCG of 97%?

- 75% of children from 12-23 months of age with completed immunization records?
- ORS usage rate of 50%?
- 75% of preschool children consuming a vitamin A-rich food twice a week?

These types of indicators are already in the DIP for each intervention, but there they represent a state of achievement which the project and the MSP will achieve together. The list above includes examples of indicators for achievement without the project's resources. The MT survey shows the progress achieved, in absolute and relative terms, since the beginning of the project. These indicators represent a good starting place for serious discussions on sustainability.

Given the progress already made by the MSP and Project HOPE, it is possible that other sustainability indicators may be added to (or exchanged for) those originally listed in the DIP. For example, as explained earlier, the MSP has already made budgetary commitments for on-going refresher training for TBAs in several Health Areas of Manabi where the project is working, In addition, the MSP in Manabi, through encouragement from the project, has been assigning additional professional health personnel (i.e., registered nurses and doctors) to rural health posts which heretofore did not have any at this level. Given this experience, Project HOPE may want to consider new indicators for sustainability, e.g.,

- % of MSP Health Areas which have budgeted for refresher meetings with TBAs; and

- % of rural health centers and sub-centers with MSP health personnel (registered nurses and doctors) in the cantons covered by the project.

The substantial achievements to date bring the project staff and their counterparts to a decision point:

- Should they continue to do "more of the same good thing" and continue their current plans regarding all interventions?

or

- Should they risk moving into the more uncertain territory of experimenting with (and inevitably failing at) some models of sustainability?

or

- Should they pursue a combination of these two lines of endeavor?

RECOMMENDATIONS

2. Identify the communities in the target area in which the project is not yet working due to difficulties of access and dispersion, and agree with the MSP, HOPE Center and AID that these will not be covered under CS VIII. If agreed, then make the necessary adjustments in the target population and objectives.

3. Discuss the advantages and disadvantages of using CS VIII's resources or other

resources to pursue the development of different local models for sustainability. Set a target data for making any major decisions which would alter the project's course, given that, as of March 1, 1994, there are only 12 full months left for the project.

xv. FINANCES

A review of the overall budget was undertaken with the Project Director. The results are:

A. EXPENDITURES TO DATE

Overall expenditures for the first half of the project (as of 12/31/93) were $436,424. This amount is approximately $33,000 less than the amount available for the remainder of the project ($469,336). Although the expenditures for any given line item differ between HOPE Center's and Project HOPE-Ecuador's individual printouts, the overall expenditures (through 12131193) agree.

The two major areas of expenditure are in personnel and transportation. The latter item was considerably overspent in the first half of the project, but since other items were underspent, the rate of expenditure for the whole project is still on target.

B. PLANS FOR THE SECOND HALF OF THE PROJECT

The amount remaining for travel will not be sufficient for this line item in the second half. It is assumed that the project's field operations will continue at the same rate in both provinces as they did in the first half. Therefore, the budget must be revised in order to increase the funds available for travel. Certain line items, such as supplies, equipment and consultants, can be reduced for the second half, thus providing additional funds for travel. The Director will prepare a revised budget for the remainder of the project which will include changes among certain categories but which will maintain the overall total budget of $905,760 for the 28-month period.

RECOMMENDATION

1. Prepare a revised budget for the second half of the project in order to increase the amount of funds for travel to the estimated necessary level.

XVI. CONCLUSIONS

CONCLUSION #1 - Accomplishments related to specific interventions

The majority of the goals have been met or surpassed for the first half of the project. In the process of gaining experience in different provinces and programming

environments, project staff and counterparts have developed an effective model for implementing child survival interventions. Particularly strong areas are immunization and maternal care; weak areas are acute lower respiratory infections and family planning.

This CS VIII project has produced very positive results in just over one year of operations. Project activities are effectively designed and implemented to provide community members, particularly mothers of small children, with a variety of opportunities in which they hear the same key health messages and can apply the information obtained. These messages are designed to increase their health knowledge, to improve their practices regarding care of their children and of themselves and to motivate them to seek specific health services from local providers (CHVs and TBAs) or from the MSP. Key results regarding specific interventions include:

- increasing the rate of children completely immunized from 48.9 % to 72.9% ;
- increasing the rate of exclusive breastfeeding in infants under six months of age from 20.6% to 27.7%;
- increasing the usage rate of ORS or home-based fluid from 16.2 % to 30.6 % ;
- increasing the rate of prenatal consultations from 67.7 % to 80.7% ; and
- meeting and/or **surpassing** all major DIP objectives in immunization, nutrition, control of diarrhea1 disease and vitamin A.

The results for acute lower respiratory infections and family planning indicate only slight and uneven progress, or actual regression, in increasing knowledge and improving practices. These results did not meet the levels as expected in the DIP for this period. These interventions will need increased attention in the second half of the project in order to improve their performance.

The following factors are especially significant contributors to the high performance levels of various interventions:

- the project's operating philosophy that it is working to support and extend the MSP's own programs;
- the emphasis on in-service training for project and cormmmity-based staff;
- the project's ability to leverage resources from other organizations and sectors; and
- the ability to mobilize all segments of the community to support and participate in project activities.

CONCLUSION #2 - Sustainability and integration with the MSP

The project has reached a crossroads where one of several available alternatives is to seriously explore options for sustainability on a case-by-case basis.

The project's achievements have been so dramatic in some instances that even the MSP is surprised by what can be accomplished by pooling resources with an NGO. The excellent relationship enjoyed between Project HOPE and the MSP at the time of this Midterm Evaluation is all the more remarkable considering that, at this point in the previous project, this relationship was at a very low point. Overall, the MSP is convinced that the results to date are extremely worthwhile and should be continued. The MSP, particularly in Manabi, would like to capitalize on the positive environment already created by the project and begin to develop and test local options - by community or by canton - where the current interest and momentum are most conducive to promoting sustainability.

XVII. RECOMMENDATIONS

The recommendations listed below are those which have appeared earlier in each chapter. These recommendations address only needed modifications in project activities in the specific interventions. By default, the evaluation team supports all other project activities and directions as currently being implemented.

V. ACCOMPLISHMENTS

A. TRAINING

B. SPECIFIC INTERVENTIONS

1. IMMUNIZATION

1. Decide how the indicator -- mother's increase in knowledge about immunization -- will be measured for the Final Evaluation (e.g., using some combination of the three questions which relate to it) and calculate results from the B and MT surveys to reflect progress achieved to date.

2. DIARRHEA

1. Undertake some qualitative information gathering (e.g., through focus groups) from MSP and private health providers (separately) to understand the reasons for prescribing antidiarrheal drugs and resistance to promoting ORS.

2. Using the information gamed in #l, engage in discussions with MSP counterparts and private health providers to develop strategies for trying to change the practices of those health providers who prescribe antidiarrheal drugs and do not promote ORS home-available fluids.

3. HOPE Center should contact the CSSP to discuss the repetitious nature of the questions about diarrhea. The Final Evaluation questionnaire should have only one question (with two parts) which will be used to measure changes in use of ORS and home-available ORS.

4. Project HOPE-Ecuador should document carefully which parts of which questions in the CSSP questionnaire were used to evaluate each DIP objective for this Midterm Evaluation and how each indicator was calculated (e.g., as an average of two sections). This documentation will be useful for the analysis of data from the Final Evaluation survey.

3. **NUTRITION**

1. Given that breastfeeding is practically a universal phenomenon (i.e., all mothers do it, even though the length of time varies), the nutrition education should first acknowledge this as a positive factor. Secondly, the messages should focus less on the advantages of breastfeeding *per* se and more on the specific messages of breastfeeding immediately after birth, exclusively, without bottles and then on proper supplementation.

2. Given breastfeeding's role not only in nutrition *per* se, but in protecting against diarrhea, ALRIs and other infections and in family planning, this topic should continue to be given emphasis from whatever angle available, regardless of the specific health topic of the day.

3. Develop a question for the Final Evaluation questionnaire which measures exclusive breastfeeding more directly than the current indirect calculation. For example, the question might be, "Do you give your child anything else to eat or drink besides breastmilk?"

4. For the Final Evaluation, decide how to measure the indicator -- increase in knowledge about nutritional needs during pregnancy and lactation -- using current or new questions in the CSSP survey and/or modify the DIP statement itself to better reflect the data which can be obtained to measure it.

5. Determine how mothers classify foods and then modify the discussion and educational techniques about diversification to include the rationale for and names of the categories they use.

6. With the CSSP, discuss the issue of the food intake section of the questionnaire and the fact that the data obtained cannot be used effectively for planning and evaluation purposes. Take out the long list of foods currently in the MT questionnaire. If necessary, develop new questions which can be easily applied and analyzed in order to measure understanding of the FACTS FOR LIFE messages and the indicators in the DIP.

7. Reconsider the growth monitoring activity as only desirable when it can be done correctly and with the proper frequency and follow-up.

4. VITAMIN A

1. Develop and test locally feasible strategies for maintaining the seed supply when Project HOPE is no longer able to provide free and/or subsidized seeds. Consider one or more of Project HOPE's Community Health Banks as an intermediary for purchasing seeds in bulk and then selling in smaller quantities to families in the project area. Consult with other gardening projects in Ecuador; ask Dr. David Nelson to provide VITAL report on home gardens; consult with Project HOPE staff in Guatemala.

2. Create another objective for the Vitamin A intervention which addresses changes in practice related to the consumption of vitamin A-rich foods. E.g., xx% of mothers with new home gardens will have prepared a vitamin A-rich dish for her preschool age children in the last week. Monitor this objective at various intervals before the Final Evaluation.

3. Develop and include in the Final Evaluation survey one question on the role of vitamin 'A in the prevention of disease and another on sources of vitamin A in the food supply.

IX. HEALTH INFORMATION SYSTEM

1. Consider suspending the collection of weight data for entry into the HIS.

2. For key project indicators, calculate figures which represent the combined results of Azuay and Manabi and present these figures in appropriate meetings and documents (e.g., reports, meetings with counterparts and NGOs at the national level, Final Evaluation).

3. Progress in key indicators should be calculated as "percentage change" in addition to the "difference in percentage points".

4. Develop an on-going process for documenting the qualitative nature of Project

HOPE's experiences to complement the quantitative data managed by the HIS.

XIV. SUSTAINABILITY

1. Calculate the Midterm status of the sustainability indicators already listed in the DIP. Then, assign numerical target values for each one which represent the expected status of the indicator for Year 2 and Year 3. Track these in the HIS and prepare graphs for them similar to those for the other interventions.

2. Identify the communities in the target area in which the project is not yet working due to difficulties of access and dispersion, and agree with the MSP, HOPE Center and AID that these will not be covered under CS VIII. If agreed, then make the necessary adjustments in the target population and objectives.

3. Discuss the advantages and disadvantages of using CS VIII's resources or other resources to pursue the development of different local models for sustainability. Set a target data for making any major decisions which would alter the project's course, given that, as of March 1, 1994, there are only 12 full months left for the project.

xv. FINANCES

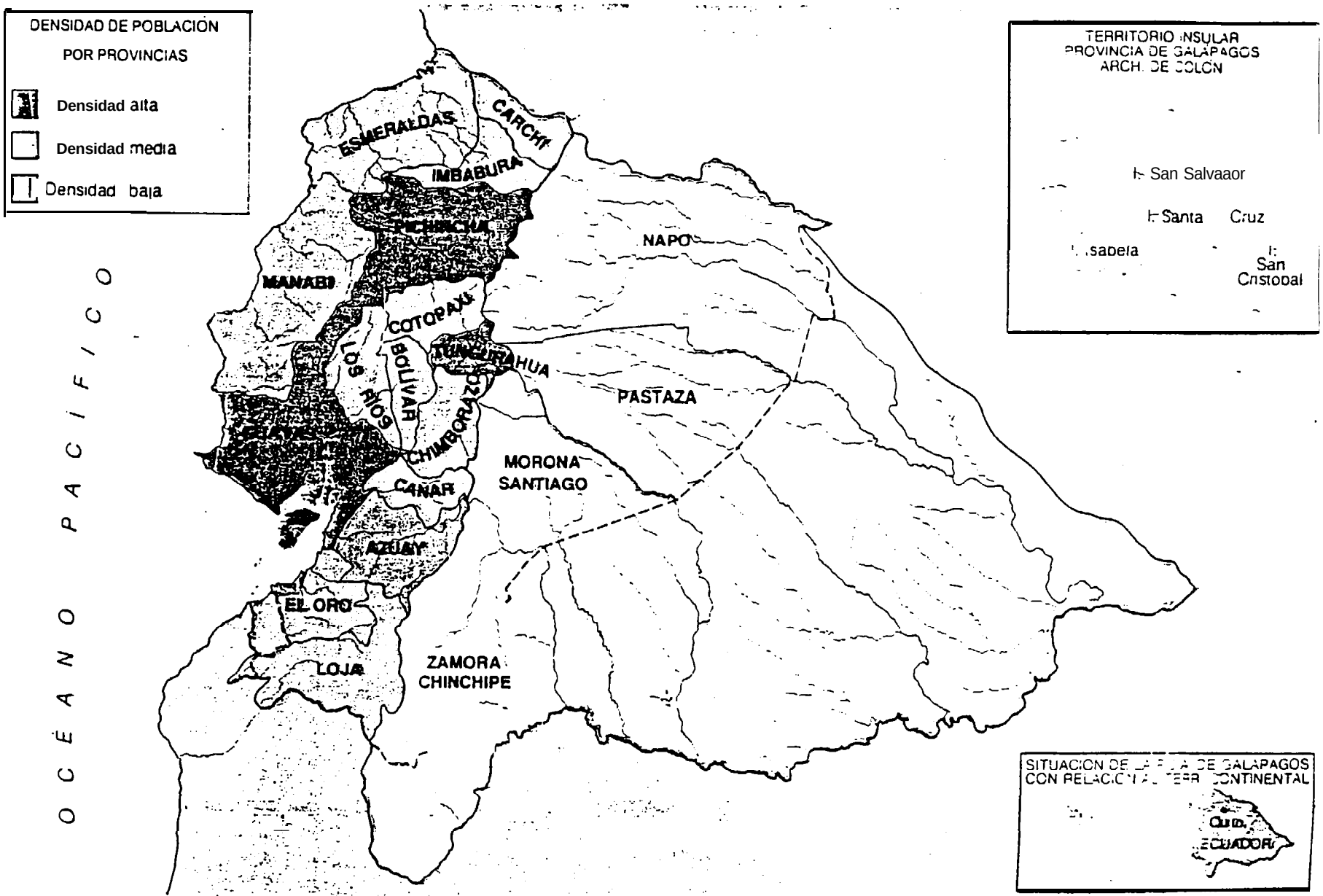
1. Prepare a revised budget for the second half of the project in order to increase the amount of funds for travel to the estimated necessary level.

APPENDIX 1

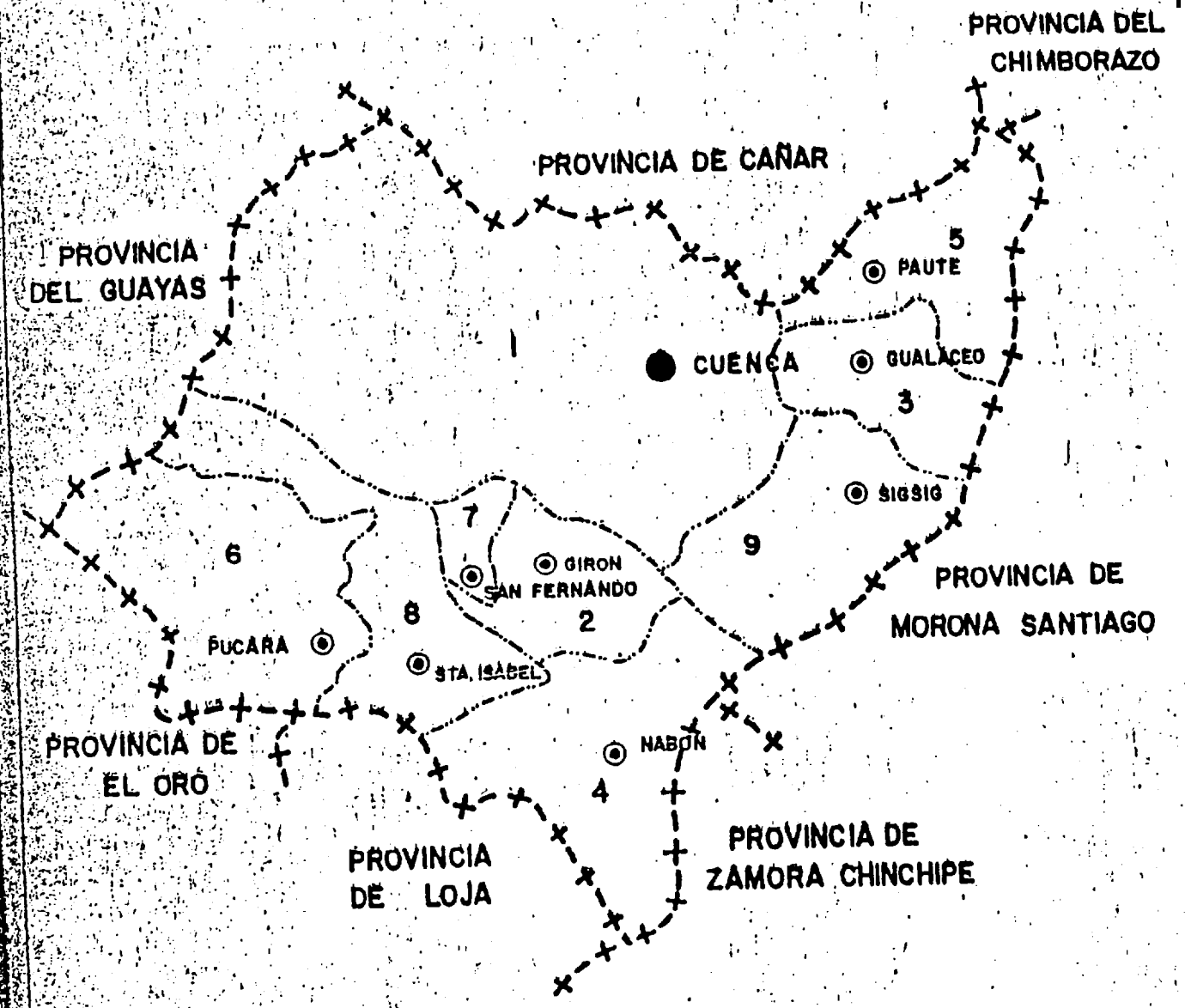
MAP OF PROJECT AREA

Población

Densidad de población



PROVINCIA DEL AZUAY



AREAS DE SALUD

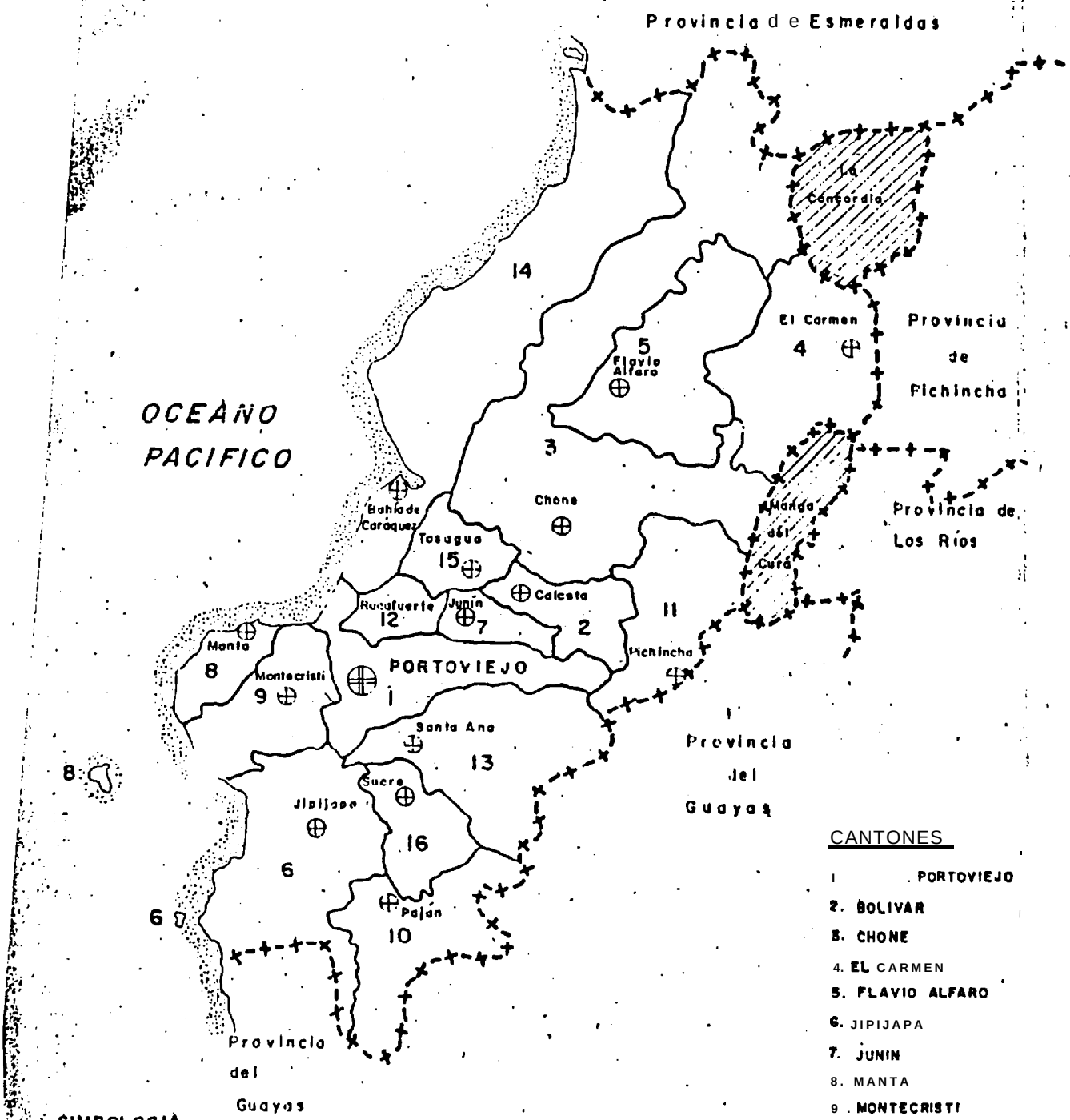
Nuevas

Anteriores

SIMBOLOGIA

- LIMITE INTERNACIONAL
- LIMITE DE PROTOCOLO
- LIMITE PROVINCIAL
- LIMITE CANTONAL
- CAPITAL PROVINCIAL
- CABECERA CANTONAL

PROVINCIA DE 'MANABI'



CANTONES

1. PORTOVIEJO
2. BOLIVAR
3. CHONE
4. EL CARMEN
5. FLAVIO ALFARO
6. JIPIJAPA
7. JUNIN
8. MANTA
9. MONTECRISTI
10. PAJAN
11. PICHINCHA
12. ROCAFUERTE
13. SANTA ANA
14. SUCRE
15. TOSAGUA
16. PAJAN
ZONAS NO DELIMITADAS

SIMBOLOGIA

- LIMITE INTERNACIONAL
- PROTOCOLO DE RIO DE JANEIRO
- LIMITE PROVINCIAL
- LIMITE CANTONAL
- CAPITAL PROVINCIAL
- CABECERA CANTONAL

AREAS DE SALUD

- Nuevas
- Anteriores

CODIGO 13

APPENDIX 2

SCHEDULE OF MIDTERM EVALUATION ACTIVITIES

February 7 Travel to Ecuador

February 8 Quito: Meetings with:

Dr. Francisco Vallejo F., Chief of Technical Cooperation, Ministry of Public Health (MSP)
Dr. Patricia Murgueytio, Asst. Director of Health, Nutrition and Population, U&AID-Ecuador
Dr. Angel Racines, Director of Development and Protection, MSP
Travel to Cuenca

February 9 Meeting of project collaborators in Canton

Project HOPE staff:
Licda. Gisella Palacios, Nutritionist
Licdo. Arturo Cruz, Community Nurse, Sta. Isabel
MSP staff:
Dr. Carlos Cacéres, Area Chief, Canton Paute
Rural nurses and doctors
Plan International staff:
Dr. Patricia Mora
Community Health Volunteers, TBAs

Community visit in Chalacay

Project HOPE staff:
Licda. Nelly Narvaez, Community Nurse, Paute
Srta. Adriana Romo, Nutrition Student
Licda. Yolanda Jácome, Social Worker
Licda. Gisella Palacios, Nutritionist
MSP staff:
Dr. Juan Torres
Community Health Volunteers

February 10 Community visit in El Tablón

Project HOPE staff:
Licda. Claudia Tello, Community Nurse, Sigsig
Srta. Amada Pezantes, Nutrition Student
Licda. Ruth Chalco, Nurse Supervisor
Community Health Volunteers

Meeting of project collaborators in Ludo

Project HOPE staff:
Licda. Yolanda Jacome, Social Worker
MSP staff:
Srta. Leonor Alvarado, Auxiliary Nurse, Ludo
Srta. Maria Dolores Crespo, Dentist
Father Pedro
Community Health Volunteers and TBAs

February 11 Meeting with Dr. Arturo Sacoto, Provincial Director of Health, Azuay

Community Visit to San Alfonso

Project HOPE staff:
Licdo. Arturo Cruz, Community Nurse, Sta. Isabel
Licda. Zaida Crespo, Social Worker
Licda. Gisella Palacios, Nutritionist
MSP staff:
Licda. Maria Lourdes Contreras, Community, Nurse, Sta. Isabel
Dr. Homero Arias, Director of Sta. Isabel Hospital
Community Health Volunteers
Doña Alejandrinha, TBA
Meeting with Mothers' Club

February 12 Community Visits to Chunazana, Cantón Cochapata

Project HOPE staff:
Licda. Gicella Palacios, Nutritionist
Licdo. Norman Villota, Community Nurse, Nabón-Oña
Licdo. Patricia Nauta, Agronomist
Dr. Jaime Pacheco, Volunteer
Staff from the Military Hospital, Cuenca:
Dr. Fernando Crespo
Assistants
Meeting with all Project HOPE staff, nutrition students and key collaborators (MSP, FASBASE, Plan International)

February 13 Free

February 14 Discussion of HIS with Paul Moscoso, Information Specialist and Lucia Ortiz, Nurse Coordinator
Discussion of educational materials with Lucia Ortiz

Discussion and review of videos with Gustavo Carrasco, Driver and Video Coordinator

February 15 Report writing and travel to Manabi

February 16 Meeting with project collaborators, Sta. Ana

Project HOPE staff:
Licda. Maria Andrade, Community Nurse, Sta. Ana
Licda. Angela Albán, Community Nurse, 24 de Mayo
MSP staff:
Dr. Hilario Cedefio, Health Director, Sta. Ana
Sras. Aracely Cedefio, Carmen Macias, Mariana Piloso, Auxiliary Nurses

Mothers' Club Meeting, Bellavista

Project HOPE staff:
Licda. Fátima Garcia, Nurse Supervisor
Ms. Ruth Navarrete, Peace Corps Volunteer
MSP staff:
Director of Health Center
Auxiliary Nurse
Community Health Volunteers, TBAs and mothers

Community Health Parade, 24 de Mayo

MSP Staff:
Dr. Homero Chiriboga, Director, Health Center
Project HOPE staff, youth group members, CHVs

February 17 Meeting with CHVs and TBAs, Junín

Project HOPE staff:
Licda. Fátima Garcia, Nurse Supervisor
Licda. Dioselina Vasquez, Community Nurse, Junín
MSP staff:
Dr. Carlos Morales, Director, Health Center
Sra. Cira Zambrano, Auxiliary Nurse
CHVs and TBAs

Visit to Health Education Workshop, Inés Moreno

Project HOPE staff:
Licda. Mercedes Santana, Social Worker
Licda. Sara Arias, Community Nurse, Bolivar

MSP staff:
Dra. Adela Bazurto, Health Sub-center
Members of Women's Club

Community Health Parade. Calceta

MSP staff:
Licdo. Victor Vera, Health Educator
Director, Calceta Hospital
Licda. Bequis Vera, Chief Nurse, Area 6
Project HOPE staff:
Licda. Fátima Garcia, Nurse Supervisor
Licda. Dioselina Vasquez, Community Nurse, Junín
Licda. Mercedes Santana, Social Worker
Licda. Sara Arias, Community Nurse, Bolivar

February 18 Community visit to Jaramijó

Project HOPE staff:
Licda. Fátima Garcia, Nurse Supervisor
Licda. Wilma Garcia, Community Nurse
Licda. Mercedes Santana, Social Worker
Ing . Estrella Vélez, Agronomist
Licda. Betty Moreira, Nutritionist
MSP staff:
Director, Health Center

Meeting with Provincial Counterparts

Dr. Héctor Velez, Provincial Health Director
Licdo. Carlos Jalil, Director of Health Education
Srta. Miriam Santana, Statistics Department

February 19 Community visit to San Sebastián

Project HOPE staff:
Licda. Yolanda Guerrero, Community Nurse, Pichincha
Licda. Fátima Garcia, Nurse Supervisor
Licda. Mercedes Santana, Social Worker
Ing. Estrella Vélez, Agronomist
MSP staff:
Dra. Alexandra Rivera, Health Director, "El Desvio"
Auxiliary Nurse, Health Center, Pichincha

Report writing

Meeting with all Project HOPE staff

February 20 Discussion of integration of Child Survival VIII activities with Community Health Banks Project

Project HOPE staff:
Ing. Carlos Cañarte, Project Coordinator, Community Health Banks
Ms. Juana Rodriguez, Assistant Director, Income Generation Programs, HOPE Center

Report writing

February 21 Report writing

February 22 Report writing

February 23 Return to USA

APPENDIX 3

TABLE 1

COMPARISON OF RESULTS FROM THE BASELINE AND MIDTERM SURVEYS

COMPARACION DE RESULTADOS DE LA ENCUESTA
DE SALUD DE LINEA BASE Vs. LA DE MEDIO TERMINO

	AZUAY				MANABI				TOTAL			
CATEGORIAS	LB	MT	IN	%IN	LB	MT	IN	%IN	LB	MT	IN	%IN
INMUNIZACION												
BCG	69.7	97.8	28.2	40.4	73.7	93.5	19.8	26.9	71.5	95.5	24.0	33.5
Antipolio 1	69.7	96.7	27.1	38.8	78.8	94.4	15.6	19.8	73.8	95.5	21.7	29.5
Antipolio 2	63.1	89.1	26.0	41.2	69.7	93.5	23.8	34.1	66.1	91.5	25.4	38.4
Antipolio 3	58.2	78.3	20.1	34.5	59.6	83.2	23.6	39.6	58.8	80.9	22.1	37.5
DPT 1	70.5	96.7	26.2	37.2	79.8	94.4	14.6	18.3	74.7	95.5	20.8	27.9
DPT 2	63.9	89.1	25.2	39.4	69.7	92.5	22.8	32.7	66.5	91.0	24.4	36.7
DPT 3	59.0	79.3	20.3	34.5	58.6	82.2	23.6	40.3	58.8	80.9	22.1	37.5
Antisarampión	54.9	91.3	36.4	66.3	53.5	83.2	29.7	55.5	54.3	86.9	32.6	60.1
Esquema Completo	50.0	77.2	27.2	54.3	47.5	69.2	21.7	45.7	48.9	72.9	24.0	49.1
NUTRICION												
Lactancia Exclusiva 0-3 meses	43.8	54.5	10.7	24.4	11.1	20.0	8.9	80.2	24.7	38.1	13.4	54.3
Lactancia Exclusiva 4-6 meses	22.6	22.0	-0.6	-2.7	7.1	8.8	1.7	23.9	15.3	16.0	0.7	4.9
Lactancia Exclusiva 0-6 meses	33.3	38.8	5.5	16.5	9.6	14.9	5.3	54.8	20.6	27.7	7.1	34.4
PLANIFICACION FAMILIAR												
Método Moderno de Planif.Familiar	5.4	7.5	2.1	38.9	30.8	36.2	5.4	17.5	17.1	20.9	3.8	22.2
INFECCION RESPIRATORIA AGUDA												
Señales de Peligro para la IRA	15.3	31.2	15.9	103.9	30.4	25.0	-5.4	-17.8	22.9	28.1	5.3	23.0
Busco Ayuda Profesional para la TOS	38.3	29.2	-9.1	-23.8	44.3	46.5	2.2	5.0	41.7	38.6	-3.1	-7.5
ATENCION MATERNA												
Tenencia de Carnet Materno	11.0	46.9	35.9	326.4	27.1	62.2	35.1	129.5	18.8	54.5	35.7	189.3
Atención Post-Parto	22.9	23.8	0.9	3.9	37.1	44.1	7.0	18.9	24.1	34.0	9.9	41.0
Atención Prenatal	64.0	74.5	10.5	16.4	71.6	87.0	15.4	21.5	67.7	80.7	13.0	19.1
Toxóide Tetánico	3.4	33.9	30.5	897.1	16.2	46.2	30.0	185.2	9.7	40.0	30.4	313.8
MANEJO APROPIADO DE DIARREA												
Dar comida más frecuentemente	0.0	9.4	9.4	ERR	3.5	10.7	7.2	205.7	1.6	9.9	8.2	508.6
Dar más comida cuando se recupera	1.0	10.4	9.4	940.0	3.5	1.8	-1.7	-48.6	2.2	7.2	5.1	234.7
Líquidos, Aguitas	42.9	59.4	16.5	38.5	25.2	33.3	8.1	32.1	23.8	46.8	23.0	96.7
Suero Oral	9.2	21.9	12.7	138.0	19.5	26.7	7.2	36.9	14.1	24.2	10.1	72.1
Suero Casero	3.1	8.3	5.2	167.7	1.1	4.4	3.3	300.0	2.2	6.5	4.3	198.4
CONTROL DE CRECIMIENTO												
Tenencia de Carnet Infantil	72.5	81.2	8.7	12.0	77.3	92.4	15.1	19.5	74.8	86.8	12.0	16.0
Peso en los tres últimos meses	24.6	58.2	33.6	136.6	46.3	72.7	26.4	57.0	35.6	65.9	30.3	85.1

LEYENDA:

LB Resultados de la encuesta de Línea Base
MT Resultados de la encuesta de evaluación de medio termino
IN Incremento en puntos de la Evaluación sobre la Línea Base
%IN Incremento en porcentajes de la Evaluación sobre la Línea Base

REF. COMPAQ_C:\QPW\SAMPLES\RESVAC.WB1

APPENDIX 4

PIPELINE ANALYSIS

1993 ANNUAL REPORT FORM A: COUNTRY PROJECT PIPELINE ANALYSIS

PVO/COUNTRY PROJECT: ECUADOR CHILD SURVIVAL

TOTAL-HEADQUARTERS & FIELD	ACTUAL EXPENDITURES TO DATE (11/01/92 to 12/31/93)			PROJECTED EXPENDITURES AGAINST REMAINING OBLIGATED FUNDS (01/01/94 to 02/28/95)			TOTAL AGREEMENT BUDGET (COLUMNS 1 & 2) (11/01/92 to 02/28/95)		
	AID	PVO	TOTAL	AID	PVO	TOTAL	AID	PVO	TOTAL
TOTAL-HEADQUARTERS	33,710	24,560	58,270	66,970	9,000	75,970	100,680	33,560	134,240
TOTAL-FIELD	258,855	177,569	436,424	420,465	48,871	469,336	679,320	226,440	905,760
GRAND TOTAL	292,565	202,129	494,694	487,435	57,871	545,306	780,000	260,000	1,040,000

1993 ANNUAL REPORT FORM A: COUNTRY PROJECT PIPELINE ANALYSIS

PVO/COUNTRY PROJECT: ECUADOR CHILD SURVIVAL

FIELD	ACTUAL EXPENDITURES TO DATE (11/01/92 to 12/31/93)			PROJECTED EXPENDITURES AGAINST REMAINING OBLIGATED FUNDS (01/01/94 to 02/28/95)			TOTAL AGREEMENT BUDGET (COLUMNS 1 & 2) (11/01/92 to 02/28/95)		
COST ELEMENTS:	AID	PVO	TOTAL	AID	PVO	TOTAL	AID	PVO	TOTAL
I. PROCUREMENT									
A. Supplies	0	19,815	19,815	0	26,074	26,074	0	45,889	45,889
B. Equipment	0	21,735	21,735	0	10,025	10,025	0	31,760	31,760
C. Services/Consultants									
1. Local	0	1,963	1,963	0	9,437	9,437	0	11,400	11,400
2. Expatriate	0	0	0	0	0	0	0	0	0
SUBTOTAL-PROCUREMENT	0	43,513	43,513	0	45,536	45,536	0	89,049	89,049
II. EVALUATION	0	0	0	9,525	2,345	11,870	9,525	2,345	11,870
SUBTOTAL-EVALUATION	0	0	0	9,525	2,345	11,870	9,525	2,345	11,870
III. INDIRECT COSTS									
A. Overhead on Field (55%)	59,616	42,094	101,712	130,044	0	130,044	169,662	42,094	231,756
SUBTOTAL-INDIRECT COSTS	59,618	42,094	101,712	130,044	0	130,044	189,662	42,094	231,756
IV. OTHER PROGRAM COSTS									
A. Personnel									
1. Technical	77,430	45,741	123,171	156,625	0	156,625	234,055	45,741	279,796
2. Administrative	34,400	18,528	52,928	68,002	230	68,232	102,402	18,758	121,160
3. Support	5,388	3,444	8,832	11,586	0	11,586	16,974	3,444	20,418
B. Travel/Per Diems									
1. In-country	67,324	17,875	85,199	22,122	0	22,122	89,446	17,875	107,321
2. International	0	0	0	2,516	304	2,820	2,516	304	2,820
C. Other Direct Costs									
1. Utilities, printing, rent, etc.	14,695	6,374	21,069	20,045	456	20,501	34,740	6,830	41,570
SUBTOTAL-OTHER PROGRAM COSTS	199,237	91,962	291,199	280,896	990	281,886	480,133	92,952	573,085
TOTAL-FIELD	258,855	177,569	436,424	420,465	48,871	469,336	679,320	226,440	905,760

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PVO/COUNTRY PROJECT: ECUADOR CHILD SURVIVAL

HEADQUARTERS

COST ELEMENTS:	ACTUAL EXPENDITURES TO DATE (11/01/92 to 12/31/93) AID	PVO	TOTAL	PROJECTED EXPENDITURES AGAINST REMAINING OBLIGATED FUNDS (01/01/94 to 02/28/95) AID	PVO	TOTAL	TOTAL AGREEMENT BUDGET (COLUMNS 1 & 2) (11/01/92 to 02/28/95) AID	PVO	TOTAL
I. PROCUREMENT									
A. Supplies	0	1,560	1,560	0	0	0	0	1,560	1,560
B. Equipment	0	832	832	0	0	0	0	832	832
C. Services/Consultants									
1. Local	0	0	0	0	0	0	0	0	0
2. Expatriate	874	687	1,561	6,863	1,616	8,479	7,737	2,303	10,040
SUBTOTAL-PROCUREMENT	874	3,079	3,953	6,863	1,616	8,479	7,737	4,695	12,432
II. EVALUATION	0	0	0	0	0	0			
SUBTOTAL-EVALUATION	0	0	0	0	0	0			
III. INDIRECT COSTS									
A. Overhead on HQ/HO (55%)	8,374	5,926	14,300	12,107	462	12,569	20,481	6,388	26,869
SUBTOTAL-INDIRECT COSTS	8,374	5,926	14,300	12,107	462	12,569	20,481	6,388	26,869
IV. OTHER PROGRAM COSTS									
A. Personnel									
1. Technical	7,286	4,906	12,192	11,941	1,112	13,053	19,227	6,018	25,245
2. Administrative	4,532	2,622	7,154	6,695	905	7,600	11,227	3,527	14,754
3. Support	4,536	2,115	6,651	2,201	0	2,201	6,737	2,115	8,852
B. Travel/Per Diems									
1. In-country	5,969	4,651	10,620	9,484	0	9,484	15,453	4,651	20,104
2. International	1,239	654	1,893	6,989	1,894	8,883	8,228	2,548	10,776
C. Other Direct Costs									
1. Utilities, printing, rent, etc.	SO0	607	1,507	10,690	3,011	13,701	11,590	3,618	15,208
SUBTOTAL-OTHER PROGRAM COSTS	24,462	15,555	40,017	48,000	6,922	54,922	72,462	22,477	94,939
TOTAL-HEADQUARTERS	33,710	24,560	58,270	66,970	9,000	75,970	100,680	33,560	134,240

APPENDIX 5

INTEGRATION OF CS VIII AND COMMUNITY HEALTH BANKS

In September 1992, Project HOPE received a USAID FHA/PVC Matching Grant to implement community health banks in the CS VIII project area of Manabi. The objective of this grant is to test whether a financial strategy component could enhance the impact and sustainability of health education activities. The community health bank activity provides an additional audience that receives child survival's low-cost preventive health messages. Unlike other community banks implemented for purely credit reasons, Project HOPE's health banks have a dual role:

- they must provide members (all mothers), who are often members of CS mothers' clubs, with working capital loans which allow them to carry out their micro-enterprise, and

- they must simultaneously provide health education so that mothers apply the knowledge gained and, as necessary, use the profits from their credit activities for wise purchases of goods and services to enhance their own, their children's and their family's health and well-being.

The creation of this health bank, or credit plus approach, was born of the real need to provide mothers the means to health. When women's economic capacity improves, they are better able to put health messages and knowledge into practice, e.g., by buying more nutritious foods, medicines, education for their children, etc. The model also includes regular health education and promotion activities such as specific services in child survival interventions (e.g., immunizations, growth monitoring), and the sale or distribution of products that improve community nutrition and health (sale of vegetable seeds; ORS packets).

Bi-monthly bank meetings provide fertile ground where health messages are transmitted and reinforced by group discussions. Each bank has two health officers that 1) program and implement health activities, 2) verify bank member's health cards for immunizations and growth monitoring and, 3) provide surveillance of and organize activities for community health. These officers receive a scaled-down version of the CHV training program in CS, as well as opportune technical assistance from CS cantonal nurses and other CHVs. CS staff are tailoring a curriculum of health messages and activities specifically for bank use. CS staff will also coordinate and implement an educational seminar for bank members, covering the basic child survival intervention areas in addition to topics selected by the women themselves (e.g., alcoholism, healthy child development, domestic violence, HIV/AIDS).

Once banks are firmly established, group loans will be made to pursue activities that enhance nutrition and health. Members may use these loans to create stores that sell products for hygiene and health (e.g., soap, condoms, vitamins, ORS, vegetable seeds, common household medicines, and medicinal herbs) and/or create community services that enhance health through such things as cost-recoverable clean water, latrine servicing, garbage removal, or communal bathing and washing facilities.

The issue of sustainability is taken into consideration from the outset at the creation of a community health bank. Bi-weekly health bank meetings provide a sustained, attentive and disciplined network of audiences that will receive health messages on a regular basis.